IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF OREGON

IN RE: INTEL CORP. CPU MARKETING, SALES PRACTICES, AND PRODUCTS LIABILITY LITIGATION	) Case No. 3:18-md-02828-SI)) February 19, 2019)
This Document Relates to All Actions.	) Portland, Oregon

(Motion Hearing)

TRANSCRIPT OF PROCEEDINGS

BEFORE THE HONORABLE MICHAEL H. SIMON

UNITED STATES DISTRICT COURT JUDGE

APPEARANCES

FOR THE PLAINTIFFS:
Mr. Christopher Seeger
Mr. Christopher Ayers
Mr. David Buchanan
Seeger Weiss, LLP
55 Challenger Road, Sixth Floor
Ridgefield Park, NJ 07660

Ms. Rosemary Rivas
Levi & Korsinsky, LLP
44 Montgomery Street, Suite 650
San Francisco, CA 94104

FOR THE DEFENDANT:
Mr. Daniel Katz
Mr. Thomas S. Chapman
Ms. Susanna Rychlak Allen
Williams & Connolly, LLP
725 12th Street, NW
Washington, D.C. 20005

COURT REPORTER:
Dennis W. Apodaca, CSR, RMR, RDR
United States District Courthouse
1000 S.W. Third Ave., Room 301
Portland, OR 97204
(503) 326-8182

(February 19, 2019)

(P R O C E E D I N G S)

(Open court:)

THE CLERK: Your Honor, this is the time set for oral argument in MDL case 18-2828-SI, Intel Corp. CPU Marketing, Sales Practices, and Product Liability Litigation.

Could I have counsel in court, beginning with plaintiff, please identify yourself for the record.

MR. SEEGER: Good morning, Your Honor. Chris Seeger for plaintiffs. With me is Chris Ayers and Dave Buchanan from Seeger Weiss.

MS. RIVAS: Good morning, Your Honor. Rosemary Rivas for the plaintiffs.

THE COURT: Good morning.

THE CLERK: And for Intel.

MR. KATZ: Dan Katz on behalf of Intel Corporation.

THE COURT: Good morning.

MR. CHAPMAN: Good morning, Your Honor. Thomas Chapman also for Intel.

THE COURT: Good morning.

MS. ALLEN: Good morning, Your Honor. Susanna Allen for Intel.

THE COURT: Good morning.

All right. We are here on two motions. I have read all of the pleadings. I have re-read the consolidated

complaint. I have read a number of the cases that both sides have cited. The motions before us are Defendant Intel's motion, or really corrected motion to dismiss, Docket 141. And relatedly, Intel's motion to take judicial notice, Docket 139.

I have no particular thoughts on the best way to proceed in this oral argument, and so I look forward to counsel telling me what you all think would be best. Let me tell you in terms of timing, I have allocated as much time for this argument as it reasonably needs. To the extent that you want to go past the lunch hour, I would like to take a modest, reasonable lunch break. To the extent that you think that it needs to go into the afternoon, I have a 30-minute criminal matter scheduled at 2:00 p.m.

Is that right, Mary, and is that still on?

THE CLERK: Yes.

THE COURT: Okay. Then I'll have to make sure I can handle from 2:00 to 2:30. If you don't want to take that long, you don't have to.

But how do you all think would be the best way to proceed? Let me start by asking the movant.

Mr. Katz.

MR. KATZ: Your Honor, frankly, depending on the Court's questioning, I wouldn't think that we would have to go past the lunch break. I'm prepared to proceed now.

THE COURT: That's fine. You certainly don't need to

repeat everything that is in the briefs, because I have read all of the briefs several times. But that said, I look forward to your arguments.

Mr. Seeger or Ms. Rivas, is there anything that either of you wish to say very briefly before we begin with the substance of the arguments?

MR. SEEGER: I think for the plaintiffs' side of it, we probably would need 40 minutes together, depending on what Mr. Katz says.

THE COURT: All right. Well, take what you need. I do urge everyone to speak slowly, and I look forward to your comments.

Mr. Katz.

MR. KATZ: Thank you, Your Honor.

Now that plaintiffs have abandoned their affirmative misrepresentations claims, this case presents an even more compelling case for dismissal than the similar cases that were brought against AMD and Apple.

I want to start with standing, Your Honor. First, with the basics: Standing, of course, requires the plaintiffs to plead a concrete and particularized injury as to themselves, but in this case not a single one pleads an actual or imminent hack, any market value decline of their devices, discontinued use of their devices, or any specific performance impact.

The standing in this case is based on alleged

overpayment at the time of sale. In other words -- and I think critically for this entire argument, it is based on a loss of benefit of the bargain here. So, of course, Cahen is the key Ninth Circuit case. Legally and factually, it's on all fours with this one because plaintiffs alleged overpayment for a defective computer system in their vehicles that they alleged was vulnerable to malicious hacking; and like here, the potential hack was only demonstrated in a controlled environment.

The Court held in that case that the injury was speculative. There were no allegations to support any market value decline, like lower Kelley Blue Book values or product recall. There was no allegation that any plaintiffs had been forced to discontinue using their vehicles. The Ninth Circuit noted, of critical importance, that the alleged defect impacted nearly 100 percent of the cars on the market. Of course, in this case it is indisputable that the entire market has been impacted. In the cases against AMD and Apple, the chips there, like here, are all alleged to be unmerchantable.

THE COURT: How would that analysis fare under the Eighth Circuit's opinion in Kuhns? I don't know if you are familiar with Kuhns v. Scottrade. That was essentially like a database problem. In that case, on standing, the Eighth Circuit said that Kuhns alleged that a bargained for and expected protection of his personal identifying information;

that Scottrade breached the contract when it failed to provide promised reasonable safeguards; and that Kuhns suffered actual injury in the diminished value of his bargain.

Then it goes on to say, "Whatever the merits of Kuhns' contract claim and his related claims for breach of implied contract and unjust enrichment, he has Article III standing to assert them."

That's Kuhns v. Scottrade at 868 F.3d 711 at 716. That's an Eighth Circuit decision from 2017.

MR. KATZ: Well, first of all, of course, Your Honor, Cahen, that analysis is the controlling case. And second, what I would say is that case is not applicable here because you are not dealing with a product defect case. There are multiple cases that we cite that say that there is no defect here because of the way it's defined, such as Lassen v. Nissan that involved the same overpayment theory as here. It is based on a defective product design.

THE COURT: But now you are getting into the merits of the case, right? And that may very well be a persuasive 12(b)(6) argument or elsewhere, but they said, based upon what they obtained, what they purchased, that they've not gotten the benefit of their bargain. There is unjust enrichment to the defendant. That's what they allege. We will talk about it soon enough on the 12(b)(6).

But why isn't that sufficient for standing?

MR. KATZ: Your Honor, the Lassen v. Nissan case is a standing case. Birdsong is to the same effect, which is the controlling Ninth Circuit authority, one of the seminal cases. There, the plaintiffs alleged that they had standing because there was lack of an iPod safety feature and that was part of their benefit of the bargain.

But the Ninth Circuit held that that loss, under Ninth Circuit law, is hypothetical because it was alleged as to the plaintiffs themselves that they suffered a hearing loss, but more importantly, an additional safety feature wasn't part of the bargain to begin with. So that was considered not a merits question. It was considered a standing question. And the case was thrown out on that basis.

Lassen is to the same effect. There is no basis to assert that consumers bargained for an additional safety feature. Therefore, the case was dismissed based on standing.

THE COURT: And that's what I'm having a difficulty following, because I understand the argument that the consumers didn't bargain for a safety feature, but that seems to me a merits argument. Maybe it is addressed at 12(b)(6); maybe it can be dealt with on plausibility issues. But I don't understand why that allegation is sufficient for standing.

What really is the teaching from Lassen and Birdsong on that point?

MR. KATZ: On that point it's that you take a

situation, just like you said in the Eighth Circuit, where the consumer comes in and says, "Look, you can play this for extended periods of time at very high volume, and that subjects us to a real risk of hearing loss, and you should have designed the product differently, because that was part of the bargain under a benefit-of-the-bargain theory. We wouldn't have bought it or we would have paid less."

The Ninth Circuit said that that does not get you over the bar for standing, because there is no evidence that you bargained for that particular feature. We will talk later about what that means in terms of a no-harm product liability case. But consistently, at least in the Ninth Circuit, these issues have been addressed in the standing context.

I would also cite the Court to the case of Azoulai v. BMW, which is a Northern District case from 2017. That case applied Birdsong and Lassen and said that there was no standing relating to BMW's automatic door-shutting feature, even though all plaintiffs in that case had their fingers literally crushed in the BMW doors.

The Court said that lack of a sensor was not part of the bargain. What you have there is an effort to recast a no-harm product liability case into a consumer fraud case, and you can't seek benefit-of-the-bargain damages. You don't have standing because there is no bargaining for that additional safety feature.

Now, what the Court said is they could have pled standing if they pled that they were physically injured, because they have manifest physical injuries. But what all of those cases stand for in the Ninth Circuit is that you actually don't have standing if you haven't pled a plausible defect. The Ninth Circuit and the District Courts have been very vigilant about that, when you take a no-harm product liability case and try to convert it into a benefit-of-the-bargain case.

You have to remember here, Your Honor, it is even more extreme, because the plaintiffs say that this defect has existed since 1995. That's in paragraph 4 of their complaint and the opposition at 3. So what they say, "We don't like your product design. You should have been at a different place on the continuum between safety and security. We haven't suffered any tangible injury."

They are suing for people who bought in 2006 and dumped their computer in a landfill in 2011. That's the very essence of a claim where no one has suffered concrete harm. Birdsong is just a continuation of all the Supreme Court precedent, leading up to, of course, Spokeo and Clapper that you have to really allege a palpable injury.

You cited a database case that I would submit is not consistent with Birdsong, if interpreted that way, but also I think it is important to recognize what it is that the plaintiffs are claiming. They're saying that their case isn't

based on any fear of an actual hack. They say that their case isn't based on whether or to what extent any particular plaintiff was impacted in terms of performance. It's based purely on their contention that since 1995 that they don't like Intel's product design and Intel should have made a different decision on that continuum.

So at least all of the cases I cited to you, including Birdsong, Lassen, and Azoulai treat this as a standing issue, and I think this Court should do the same.

I also think that Judge Davila got it right in In re Apple Processor, because he applied Cahen to say there's no injury in fact. There was no allegation in that case, just like here, about the decline of value of iDevices. There is no allegation about any plaintiff discontinuing using the device. There is nothing about any plaintiff personally experiencing specifically any performance impact.

I would submit to you that this case is even more compelling for dismissal because the plaintiffs expressly state to the Court in their opposition at page 12 that they are not basing their case on the performance impact of any patches.

In keeping with that approach, Your Honor, 94 of 95 plaintiffs in this case say absolutely nothing about the performance impact whatsoever. Only one -- that's DK Systems -- does so vaguely.

So here, I think it is even more extreme than that,

Your Honor, from a standing perspective because the plaintiffs actually plead facts that negate any price impact from the disclosure of the vulnerability. Five plaintiffs bought in 2018, and they don't allege that they paid less. They allege that after all of the information was in the public domain starting on January 2nd, that they actually overpaid, completely negating any allegation that there was harm here.

With respect to the plaintiffs' cases, Your Honor, that they cite and principally rely on for standing, they are dealing with cases where the products have actually malfunctioned, and there is some nonspeculative injury; for example, In Re: Toyota Unintended Acceleration. In that case you are talking about specific allegations of unintended acceleration. So the product was not operating as designed. It led to fatal accidents, recalls, lower Kelley Blue Book values. That's the sort of case where there is clearly standing.

None of that is pled here. When you look at the facts in these cases and the lengths that the plaintiffs went to plead concrete injury: 17,900 cases reported, even five Toyota mechanics, recalls, fines by the National Highway Transportation & Safety Board to the tune of $16.4 million. None of that is true here.

The In Re Chrysler Gearshift case is another case they cite, where the car wouldn't properly go into park, and

that led to 300 complaints of cars moving unattended, at least one death, many injuries, recalls, extreme depreciation. That's the stuff of which standing is made.

The case that they principally rely on, Your Honor, in addition to the car cases, is Hinojas v. Kohl's, a Ninth Circuit case which I'm sure you are familiar with from 2013, that predated Cahen. That case is completely distinguishable, because, first of all, it is not a product defect case. Second of all, it involved a fabricated price, an economic injury, that the Cahen court said was not speculative and directly ascertainable. That was in fact the District Court decision.

Your Honor, unless you have any further questions on standing, I'll move on to implied warranty, but I think the law is quite clear in the Ninth Circuit. I think Judge Davila got it right. I think it is on all fours with Cahen for all the reasons I said, including the market-wide impact; the speculative harm; no allegation of market impact; and actually allegations that negate market impact since, once the information was out there, people are saying they still overpaid.

I would also highlight to the Court, not only are there five people who bought in 2018, there are two people who are named plaintiffs who bought after they filed suit, after having advice of counsel, after saying, "We wouldn't have

bought a device with an Intel processor, or we would have paid less." They still buy and come in and say they still overpaid. I think that's very, very important for the Court to keep in mind in assessing the complaint that has been brought.

Regarding the implied warranty claim, first of all, I know that Judge Koh didn't reach this and the Hauck case went right to merchantability, but there is no vertical privity here.

THE COURT: By the way, I know that one of the responses to the question I'm about to ask is they didn't plead third-party beneficiary. They didn't; I get that. If they had, isn't the direction that at least California law is going on vertical privity to be more open to arguments of third-party beneficiary claims, at least when it is pled?

MR. KATZ: I don't think that's right, Your Honor. The way I would respond to it is this: There are some federal District Court cases, and I think those are the cases that you may be referring to, that indicate that there is a third-party beneficiary exception. However, I would cite the Court to In re Seagate Tech., a Northern District case from 2017. The Court there said that no California case has applied a third-party beneficiary exception to a consumer claim against a product manufacturer.

And we searched for one, Your Honor, and did not find any California Court of Appeals case, and certainly no

California Supreme Court case, that applied it in that fashion. The In re Seagate court said that it would be hard to imagine a more thorough nullification of the Clemens case than that.

THE COURT: Although what was the product in Seagate? I thought that's where the manufacturer supplied to a dealer who then sold to the consumer; whereas here we have a manufacturer of a component selling to a manufacturer of a computer who then sells to the consumer.

Is that difference to a third-party beneficiary analysis?

MR. KATZ: I don't think that's a difference. Your Honor, I would say, here, many of the plaintiffs are two steps removed, because of Intel selling to HP, selling to Best Buy, selling to a consumer, so a two step --

THE COURT: But the third-party beneficiary analysis would run from Intel to the assembler and manufacturer of the computer?

MR. KATZ: Right. And I don't think it makes particularly any difference that there is another step in the chain. But I think what is important is that Clemens from 2008, which I know Your Honor is familiar with, that was obviously a consumer purchasing a car from a dealer and was held not to be in privity with the manufacturer.

The Ninth Circuit said that the California courts have painstakingly set out the exceptions to the privity

requirement, and certainly a third-party beneficiary exception specifically wasn't one of them.

Where this all emanates from, where the District Courts say there is such an exception, they get from Gilbert Financial, which is a Court of Appeals case from '78. That involved a roofing subcontractor that stepped into the shoes of the general contractor for the part of the project that related to the roof, and it was held that you could maintain a claim against the subcontractor, but interestingly the Court said in that case that it didn't need to decide the issue of privity per se in that case because there was such a direct contractual connection between the subcontractor and the homeowner.

THE COURT: It's probably an unfair question, but if you are right on the requirement of privity and it is that clear, why didn't Judge Koh address it in Hauck v. AMD?

MR. KATZ: The reason why she may not have addressed it, just from reading her opinion, Your Honor, is because it is just so clear in this case that there's no breach of the implied warranty of merchantability; that it is such a slam-dunk decision that she just went right to it and didn't address the privity requirement.

THE COURT: And I assume you feel the same way in this case?

MR. KATZ: I do. I'll address that in a minute. I just want to make a couple more quick points about privity.

Let's even assume the exception applied. Aside from the plaintiffs not saying specifically in their complaint that they are relying on a third-party beneficiary exception, they at least would have to plead what contract they claim they're the beneficiaries.

They cite the case In re Carrier IQ from the Northern District in 2015, and that implied warranty claim was dismissed because nothing was alleged about an underlying contract. The cases that they rely on for their privity argument, they say because Intel was marketing, that's what created the privity. But the cases that they cite don't say that, like Luong v. Subaru, Northern District from 2018, that was a case where the plaintiffs alleged that Subaru was the direct seller. Because they made the allegation that Subaru was the direct seller, the Court said, "We're not going to dismiss it on the grounds of privity."

In the Cardinal Health case, that was, again, a very specific contractual situation where Tyco was a successor corporation. It was held that Tyco succeeded to the predecessor; and therefore, there was a contractual relationship and the link wasn't broken by the sale of a business. But that's far afield from what we have here

THE COURT: Is it really far afield? Here is what I'm thinking. I don't watch television that much, but when I do, I do notice some of these Intel commercials. Since I can't

carry a tune, I can't do that little jingle. But I know they are marketing directly to consumers to want to select a computer that has Intel inside. They put the label on there so that the consumer will know whether they are or are not getting a computer with Intel inside. So even though they are not selling processors to end-users, they sure look like they are marketing.

What's the implication of that?

MR. KATZ: Certainly Intel is marketing. I would agree with you, and I would concede that. But I really don't think that that plays into the vertical privity analysis. I haven't seen any case. I haven't even seen a District Court case that said simply because you market, that would create privity; that that's part of the analysis.

Even the District Court cases that say there's a third-party beneficiary exception, at least require, like In re Carrier IQ, that you point to a specific contract. I don't think just simply by marketing and ads being put out there that you then blow through the privity requirement. I would say if that was the case, then there is really nothing left whatsoever of Clemens v. DaimlerChrysler.

I would come back to that, in Clemens, it did painstakingly lay out the exceptions recognized by the California courts, third-party beneficiaries is one of them, and as I said, Your Honor, I was not able to locate any case

where there is a California state court that says that that's one of the exceptions.

THE COURT: But Clemens didn't address a situation of a manufacturer marketing directly to the consumer, and I wonder if that is another basis to find an exception to vertical privity requirements.

MR. KATZ: Well, you're talking about, in Clemens v. DaimlerChrysler, a car manufacturer, and there are a lot of car cases. Car manufacturers certainly are all over the airwaves advertising to consumers. Clemens said that a consumer purchasing a car from a dealer is not in privity with the manufacturer. So I think that that would have been apparent, and I haven't seen any case citing advertising as the linchpin of the analysis.

Moving on to the merchantability, the standard is that the product has to lack even the most basic degree of fitness for ordinary use. That's Birdsong.

Hauck said, and I think this is important, Your Honor, that the alleged defect in that case -- and Judge Koh analyzed, whether it is 20 years of serious security vulnerabilities, whether it is vulnerabilities created by AMD's design, which is the same as our case, or Spectre, there is no allegation that there is a compromise of safety; that processors are rendered inoperable; that functionality is drastically reduced.

Judge Koh specifically analyzed a 5 to 30 percent slowdown after patching and said that that doesn't render the processors unfit for their ordinary purpose. The complaint here at paragraphs 298, 303, and 306 also cite this same up to 30 percent impact.

But I think it is also critical, Your Honor, to note, in addition to Judge Koh's analysis, think about it: The alleged defect here has existed since 1995. So the implied warranty standard can't possibly be met. I don't see how it can be seriously contended that the defect, as defined in this case, that since 1995 that all Intel processors have lacked even the most basic degree of fitness for ordinary use; that the processors all that time have been computing properly; all that time there has been no hack reported.

How can it be said that they lack even the most basic degree of fitness? I would go even further and say, with respect to the defect and the vulnerability, there hadn't even been any kind of proof of concept demonstrated in a lab to maliciously exploit speculative execution.

As for the named plaintiffs bringing it up to the present time, we are batting 95 for 95 on continued use because all of them say that they applied a patch, plus you have five plaintiffs, including two with advice of counsel, buying in 2018. I would submit that it defies common sense to think that consumers are buying products after knowing that they are going

to be patched and knowing there are these vulnerabilities, that somehow they are buying a product that lacks even the most basic degree of fitness for ordinary use.

We cite other multiple cases that show that there is a very high bar set on the implied warranty of merchantability. It means not even meeting the minimum standard of quality. Kent v. Hewlett-Packard, a motion to dismiss, they're frequently granted. Just like Judge Koh granted the motion to dismiss, it was granted in Kent v. Hewlett-Packard for a laptop that routinely locked up, froze on a cold boot, because there was no data lost, and there was no allegation that anyone was forced to stop using the computer.

Baltazar v. Apple is another example from the Northern District where a motion to dismiss was granted, and it was alleged that outside, in the sunlight, iPads overheated and shut down. The Court held that they're not unfit for use anywhere.

So what I would lastly emphasize about merchantability about the clear and sharp distinction between the analysis that Judge Koh went through in Hauck and those other cases that I just discussed and the plaintiffs' cases, they are all cases where the product drastically malfunctioned or completely failed, like In re Nexus 6P Products Liability. That's one of their featured cases. There was a total failure of those phones. There was data lost. It was alleged in the

complaint that the phone is essentially an expensive paperweight. You don't have anything like that here.

In re Carrier IQ was a software installed by phone carriers that actively transmitted in realtime, even when not using the network, while using a WiFi network, data readable by third parties in unencrypted form operating a hundred percent of the time.

Isip v. Mercedes-Benz, another case that they cite. That's a car that smells, lurches, clanks, emits noise over an extended period of time. I agree that just because a car will go from point A to point B doesn't mean it's basically fit. But if there is a severe malfunction like that, such that no reasonable person is going to use it -- another example that's given is a bed with mold. You can still sleep in it, but no one wants to sleep in a bed with mold. That makes sense.

They also cite Roberts v. Electrolux; that lint accumulation in a dryer can cause fires. Maybe it will still dry clothes, but it will really dry them. It might burn them up. But we are obviously not talking about anything like that here.

So Judge Koh analyzed it from every angle no matter -- she had some difficulty about exactly what the defect was, but analyzed the situation we have here, a defect that goes back 20 years, and it relates to the design of the processor; it's not as secure as it is supposed to be. Clearly

Intel's processors are fit for use, and all of the plaintiffs here demonstrate that.

Going to duty to disclose, Your Honor -- if we get by standing, that's a central issue in the case. I would like to go into a little more detail about Wilson v. Hewlett-Packard because there is the contention that Wilson v. Hewlett-Packard is not good law anymore in the Ninth Circuit related to the standard for a duty to disclose at the threshold level.

Of course, in Wilson v. Hewlett-Packard, there's no duty to disclose in a pure omission case unless there is an unreasonable safety hazard. I would like to review with the Court why Wilson is clearly still good law and binding on this Court.

THE COURT: You're certainly welcome to do that, but I've read Hodsdon a few times, and there seems to be reluctance by the Ninth Circuit to unabashedly confirm that Wilson is still good law. So I assume that after you tell me why Wilson is still good law, you'll give me an alternative argument.

MR. KATZ: I will. In fact, Your Honor, I don't want to be defensive about it. I'll explain why this Court is bound by Wilson, but I also think that they don't come within a country mile of proving that there is a central functional defect in Intel processors that goes back to 1995.

THE COURT: And that strikes me as an easier argument for you to make than the argument that either I'm bound by

Wilson or Wilson is still good law, especially after Hodsdon. But you are welcome to make both.

MR. KATZ: I want to take a quick crack at it, if that's okay.

THE COURT: Of course.

MR. KATZ: First of all, Your Honor, Hodsdon explicitly said that we have no occasion in this case to consider whether later state court cases have effectively overruled Wilson.

They said that what they are going to proceed to do is apply plaintiffs' test of central functional defect. The Court went on to say that, of course, plaintiff couldn't state a claim, because whether there is human trafficking in the supply chain, as reprehensible as that is, it is not a central functional defect of a chocolate bar.

So, first of all, Your Honor, a Ninth Circuit panel can't overturn the decision of a previous Ninth Circuit panel, unless it's clearly inconsistent with intervening higher authority.

Collins and Rutledge, which are the two cases we are talking about, are not intervening higher authority for two reasons: First of all, Hodsdon itself noted that with respect to the six District Courts of Appeal, they don't even bind each other, and they are certainly not binding on the Ninth Circuit.

And second, post-Rutledge, which is second in time of

the two cases. That's a 2015 case. Collins v. eMachines is 2011. The Ninth Circuit twice reaffirmed the Wilson standard. Daniel v. Ford Motor Company in 2015, which was about five months after Rutledge, said that Wilson's safety hazard is still the standard.

THE COURT: Was that published or unpublished?

MR. KATZ: I believe it is a published decision. Daniel v. Ford Motor Company is cited by both us and the plaintiffs. It is a published decision that also talks about how there are two sub-elements of reliance, a later argument. Then in 2017, in Williams v. Yamaha, the Ninth Circuit again reaffirmed Wilson v. Safety Hazard Standards. So, therefore, Rutledge isn't an intervening authority of any kind.

Then, also, Your Honor, taking two of plaintiffs' cases, Sloan v. General Motors, the Northern District in 2017 -- that's cited in the opposition at 8. The Court there held it was bound to follow Wilson and not Rutledge, noting that Williams v. Yamaha postdated Rutledge.

In addition, the plaintiffs cite Lusson v. Apple in their opposition at page 36. The District Court there said that the Court is bound by Wilson Safety Hazard until the California Supreme Court clearly states that the law is otherwise.

So what I think it takes, Your Honor, for this Court not to be bound by Wilson is either a decision of the

California Supreme Court, or, of course, en banc Ninth Circuit or U.S. Supreme Court. Otherwise, the Wilson standard of safety hazard is still the law here.

Also, very briefly, before I turn to central functional defect, there are a few other things that I think the Court should consider. First of all, Hodsdon itself said that Collins and Rutledge are somewhat vague about the tests for determining whether a defendant has a duty to disclose under what circumstances.

Hodsdon noted that Rutledge can be interpreted to mean any one of three different things. That's how clear it was. One of the things is that if there is a central functional defect, that that standard only applies if the defect arises within the warranty period.

Hodsdon read Collins as standing for the proposition only that central functional defect applies within the warranty period. Of course, we are not dealing with a warranty here. So for that reason, the central functional defect, if Rutledge is read that way, it doesn't apply.

In addition --

THE COURT: Although I assume we're now going to turn to there's no central functional defect here. But if there were, whatever that might mean, but if there were, it would be present from the moment the product is sold, which is within the warranty period.

MR. KATZ: The plaintiffs are not relying on that. There is no express warranty here --

THE COURT: Right.

MR. KATZ: -- to plaintiffs.

THE COURT: Right. I just don't think that aspect of Rutledge is really where the guts of this dispute is.

MR. KATZ: Yeah, I think that's right, Your Honor. But I'd also say that I think there are really good policy reasons to follow the safety hazard standard. Daugherty v. American Honda has been a very seminal case. That's the case that Wilson relied on and articulated a policy reasons behind the safety hazards standard.

Another case, Bardin, which is relied on by the Ninth Circuit in Hodsdon, also articulates why it is important to have a very high bar on duty to disclose, and I'm going to get to that in a minute with respect to central functional defect, because California, of course, has no broad obligation to disclose.

And in a pure omission case, what Wilson discusses and what Bardin discusses, and what Daugherty discusses is that broadening the duty to disclose will eviscerate the limitations imposed by product liability law and warranty law and essentially make warranties perpetual; that the issue of safety hazard, that's something that is dealt with at the product liability law level because it is imposing strict liability on

a manufacturer to take care not to injure people.

But in the consumer fraud context, we only have a limited duty to disclose. And the reason for that, especially in a design defect case like this, there's no limiting principle on it, Your Honor. I mean, what would Intel have to disclose? Every time they make a design decision, where they're finely calibrating on the speed security continuum --

THE COURT: And you know that's one of the questions I'm going to ask plaintiffs' counsel.

MR. KATZ: And it is something that the Ninth Circuit and the California Court of Appeals was very, very concerned with, in setting that line, in Daugherty and Bardin. I mean, Bardin was a case that said that we can recover under consumer fraud law because Chrysler installed an exhaust system made out of tubular steel instead of cast iron, and the tubular steel was inferior, less durable, less expensive, and unlikely to last the useful life of the car.

Of course, the Court there held, and Hodsdon cited it with approval in discussing the unfair prong of the UCL that you don't have a case, and granted a motion to dismiss because you didn't bargain for any particular type of steel to be used in the exhaust system.

I think that that case is on all fours with this one here because there was no warranty. Chrysler made no representations about the durability of the exhaust system,

just like the plaintiffs here aren't relying on any affirmative misrepresentation, which I think is very key here that they're proceeding on a pure omission theory.

So with respect to central functional defect, the standard is that the product essentially must be incapable of use by any consumer, like a computer chip that corrupts a hard drive or a laptop screen that goes dark. And, of course, where Hodsdon got those examples were directly from Rutledge, the computer chip that corrupts the hard drive; and, in Collins, the laptop screen that goes dark.

So I think when the Ninth Circuit talks about a defect that impairs a product to the extent that it is incapable of use by any consumer, what they're talking about is that we are going to look at what the defect does to the product in an overall fashion.

For example, you could see a case where, just like in the implied warranty context -- let's say an air conditioner; you can't stop it from emitting mold. That car is going to be incapable of use, even though one might argue that an air conditioner isn't like the central function of a car.

I would say that if you look at the cases, particularly Judge Koh's analysis in Hauck, the language used in discussing central functional defect is a lot like the language that's used in discussing implied warranty. And it has to be a very high bar, because the policy considerations

that I just discussed that are set out in Daugherty and Wilson still apply. Even if it is central functional defect, it has to be a very high bar. So why can't the test possibly be met here?

Again, Your Honor, this defect is alleged to exist since 1995. So we are saying that Intel processors, since 1995, have been incapable of use by any consumer? There's no allegation that any data was corrupted. There is no allegation that they didn't compute properly. There is no allegation that anybody hacked; that any type of hack had even been developed; even a proof of concept in a lab with respect to the defect as they define it here.

THE COURT: Let me ask you this: It is probably hypothetical -- at least we don't have any evidence in this case yet -- although it may or may not be consistent with some allegations. Let's assume that there was a design feature put in in 1995 that the designer assumed would never cause a problem because there is no way that anyone would have a key to exploit it.

Then technology advances, and 25 years later someone develops a key to exploit it and that makes -- this is where we are really going to get very hypothetical and probably counter-factual, but that now makes it very unsafe to use this product, to use the processor, because the key has now been developed.

The fact that it has been in existence since 1995 doesn't mean that we don't have a serious defect. I mean, we just didn't have a defect that could be exploited until now. But now that the key has been developed 25 years after the product was introduced, that would make the product inoperable. I know you're going to say, "This is not inoperable." And that's why this is a hypothetical.

But doesn't the fact that 25 years later this key has now been developed that can make the product inoperable mean that something that wasn't a defect when it first came out 25 years ago now is?

MR. KATZ: I think you have to judge it by what decisions were being made at the time that the product is developed, and maybe you'll revisit that decision.

No, I don't think that is the right analysis. I think the analysis is the manufacturer making a reasonable design choice. And when they are making the reasonable design choice, is it foreseeable that the product -- because of that -- is going to drastically malfunction or completely fail? I think that's what you're positing, and that's the kind of case that they cite. If you're positing that the design is developed at a time when you know that it is going to be very simple for people to hack and you're not going to have any security whatsoever, such that the product is malfunctioning, then you are in "central functional defect" land.

But if a manufacturer is making a design decision to balance security and speed, like Intel did here in a certain way, the courts are very clear in the Ninth Circuit that that's not actionable.

The Bardin v. DaimlerChrysler is cited in Hodsdon. The design choice, even though when Chrysler baked in tubular steel into an exhaust system, they knew that it wouldn't be as durable. They knew that it was likely to fail arguably within the useful life of the car. But the Court said that design decision is one for Chrysler to make, and so you can't recast a no product liability/no injury case into a consumer fraud case. I'm not sure if that's what you are trying to posit. I think there's a big difference.

So the cases they cite, they are all cases where the product either completely failed or drastically malfunctioned again; the same infirmity in their analysis in the implied warranty context. Their featured case is Beyer v. Symantec from the Northern District in 2018. But in that case you are talking about Norton Symantec software, where the only purpose was security. It was alleged that the product ab initio drastically malfunctioned, including causing data corruption. And on top of that, the product actually made the computer less secure. So that's a reasonable decision by Judge Chen to let that go forward.

The Norcia v. Samsung case, a very short decision,

they also rely on. That actually involved affirmative misrepresentation, despite the fact that it was labeled an omission case. That was one where Samsung allegedly programmed the phones to fool benchmarking apps. and overstate the performance. That was the misrepresentation side of the case, so that basically the product didn't work as represented. We are not talking about that here when we are talking about a design decision, an infirmity of which is allegedly that Intel didn't properly balance speed and security back in 1995.

So for there to be any bar, Your Honor, on duty to disclose, which California has said has to be set at a very high level, whether you're applying the safety hazard standard or the central functional defect standard doesn't come close to being met.

So I would like to turn now to the LiMandri factors, and the plaintiffs are only relying on two. First, we will talk about actual knowledge, and there's no duty to disclose. So in talking about the LiMandri factors, the plaintiffs are not really entirely clear in this discussion about what the defect is. Their opposition brief at page 28 said, "Had the plaintiffs known about Spectre, Meltdown, and Foreshadow and the patches that would reduce performance, they would not have bought the products or paid less."

Your Honor, in some of the individual descriptions of named plaintiffs they talk about how if people had known about

these patches, they wouldn't have bought or paid less. That flies in the face of what they claim the defect is. But let's just assume for a moment the defect is Spectre, Meltdown, and Foreshadow. Well, there, the omission claim fails because, as Wilson and Hauck say, the actual defect at the time of sale is required and alleging "should have known" is insufficient, and the plaintiffs say that Spectre wasn't discovered until mid-2017 and the others later, and so there was no actual knowledge. So that's a problem.

But now let's talk about exclusive knowledge, where there is a big debate about what that standard is. So if it's not Spectre/Meltdown, if it is what they say in paragraph 2 of the complaint, that it is the design choice that goes back to 1995, they can't demonstrate that Intel had exclusive knowledge triggering a duty to disclose, because the way the cases that we rely on and interpret that is "exclusive knowledge" means information is not available to the public. I think it is important to go back to the source, because there is a dispute in District Courts in California over whether it is a superior knowledge standard or an exclusive knowledge standard.

It all goes back to the case of Goodman v. Kennedy, which is a 1976 decision of the California Supreme Court, and we would submit that that case articulates an exclusive knowledge standard.

THE COURT: You know, let's assume it is exclusive.

Looking at LiMandri itself, it phrases it as "when the defendant has exclusive knowledge of material facts not known or reasonably accessible to the plaintiff."

How do I unpack that analytically in the following respect: I think that if it is exclusive knowledge, it is not exclusive to Intel, from what I have seen here, because it was widely known among computer scientists based upon the papers that were presented. However, does that make it reasonably accessible to a consumer plaintiff? Well, based upon my experience about a week and a half ago, it's not reasonably accessible to a typical plaintiff.

So analytically how do I evaluate this? If it is not exclusive to Intel, because it's reasonably well-known among computer architecture scientists and experts, and they are debating the pros and cons, and they are writing about this and talking about this at conferences, but it is not reasonably accessible to the plaintiff, how do I deal with this aspect of the LiMandri factor even assuming exclusivity is the measure?

MR. KATZ: I don't know of any case that says that because the information that a defendant is deemed to have exclusive knowledge of is complicated -- this is complicated stuff -- that that somehow changes the analysis. I think that what the cases are getting at, though, like I said, is the information out in the public, or is it solely internal? We cite a legion of cases that talk about that, like Andren v.

Alere, I think, answers your question because there --

THE COURT: Which case?

MR. KATZ: Andren v. Alere, the Southern District case from 2016. The Court there held that there was no exclusive knowledge because there were some published studies and a letter posted on the FDA website about a medical testing device. People were complaining about the malfunctioning of a medical testing device. There, that was deemed sufficient.

In Herron v. Best Buy, what we were talking about there, that had to do with a laptop battery life in Toshiba laptops. There was a cite to only one article in Newsweek nine months before the plaintiff purchased the Toshiba laptop from Best Buy talking about the MMO7 test for batteries not being sufficient and misstating the battery life. That was deemed sufficient for Best Buy to not have exclusive knowledge.

THE COURT: Is there an analogy here that is apt -- there is definitely an analogy here -- whether it is apt or not, I would like your advice -- on the doctrine of fraud in the market or an efficient market hypothesis? Because if I conclude that if the test is exclusive and the technological details were well-known and debated among computer architecture specialists, even if it is not reasonably accessible to a plaintiff or to an ordinary consumer, the marketplace knows this information; and therefore, it doesn't satisfy that second factor of LiMandri?

MR. KATZ: Yeah, I think that's a good analogy. I would say to Your Honor, look at who the consumers bought the products from. The companies that were buying chips directly from Intel are sophisticated technology companies, like Dell, Lenovo, HP. They're all certainly aware of this research. They go to the same conferences. Your Honor, it is not just limited to academics publishing papers and scientists publishing papers. We are also talking about multiple patent applications that they cite. At least --

THE COURT: Which also are not accessible to the typical consumer, but I get your point.

MR. KATZ: But is that any different than tests published on the FDA website that an ordinary consumer goes on the FDA website? What the Courts are looking to, is it really exclusive, or is the information out there in the public domain? I would like to buy M&M's, but I didn't necessarily know about human trafficking in the supply chain in the Ivory Coast, which McCoy v. Nestle said that's sufficient for there to be notice of knowledge. Then there's Sud v. Costco about human trafficking in the Thai fishing industry for prawns.

THE COURT: Sure. I'm just trying to figure out how I explain my understanding of the LiMandri factor in the phrase "reasonably accessible to the plaintiff."

MR. KATZ: I think that has to be understood in the

sense that it is reasonably accessible in the public domain; that it doesn't necessarily mean that a particular plaintiff has to have read it. In all of the cases, the plaintiff said, "I wasn't aware of the Newsweek article. I wasn't aware of the letter on the FDA website." But otherwise, Your Honor, unless you have a reasoned principle, like whether the information is in the public domain, then you basically don't have any other LiMandri factors.

You're always going to be able to posit, in any technology case, for example, that the manufacturer has knowledge that a typical consumer may not have. But I haven't seen, as a limiting principle, that we look at how complex the issue is and then judge the factor that way. Otherwise, the other LiMandri factors basically are written out of existence.

And I must say, Your Honor, we searched high and low. I'm not aware of any case where the disclosure and discussion in the public domain was this widespread; that the plaintiffs recount over paragraph after paragraph after paragraph in their complaint where a defendant was deemed to have exclusive knowledge of the issue.

Your Honor, you can go back to the Goodman v. Kennedy case, the facts of that case, that involved an attorney that gave advice to his client about the complicated issue of stock registration, and third-party buyers of the stock allege that the attorney had a duty to disclose properly the registration

infirmities because that would have impacted their decision to purchase. There, the California Supreme Court held that the attorney did not have exclusive knowledge of the stock registration requirements in a transaction that the attorney himself handled.

I would argue that if the standard was lower, if it was like some kind of hybrid exclusive knowledge/superior knowledge, it's not within the realm of the understanding of an ordinary layperson, the decision in the Goodman v. Kennedy case would have come out the other way.

THE COURT: And as I understand the plaintiffs' allegations, and tell me if you understand them the same way, and we will hear from plaintiff later, but if we're talking about exclusive knowledge of the sort that was only learned and/or discovered after the Google Project Zero information was disclosed -- first of all, it wasn't exclusive to Intel if it was discovered by Google Project Zero, but if that's the sort of information that they are talking about, to that degree of granularity and specificity, there's no allegation in the consolidated amended complaint now that Intel knew about that before it was disclosed more generally in 2017.

Is that how you read the complaint?

MR. KATZ: That's right. That's right. They're saying that, in the complaint, it was discovered.

THE COURT: Right.

MR. KATZ: I think of "discover" to me -- that's why we set this out in my brief. I opened with if they're talking about that was really the defect, then there's no actual knowledge. That's what Judge Koh talked about.

THE COURT: And if they were to allege that that is something that Intel knew about before it was disclosed publicly or before it was even discovered by Google's Project Zero, that may be intellectually interesting, but that's not what is alleged in the complaint.

MR. KATZ: It's certainly not alleged in the complaint, and then, also, "should have known" is not the standard.

THE COURT: I agree with that. Hypothetically, if there would someday be a case that says, "You knew about this back then and didn't tell anybody," that may fit within the exclusive knowledge, even if it wasn't generally known even within the technical community, but that's not what they've alleged in this case.

MR. KATZ: Right. That's right. They could. But what you're talking about here, like we have been saying, is this design choice that goes back to 1995, and the complaint is literally trumpeting how this was so openly discussed: In so many articles, books warning about the caches being vulnerable to side-channel attacks, about speculation-based side-channel vulnerabilities, and the like.

If that's what they are claiming the design choice is, then it is out in the open.

THE COURT: Sure. So the only thing that really might not have been out in the open until Google Project Zero was that there was a proof of concept shown where, under laboratory conditions, yes, these things that were out in the open could actually be exploited.

Am I right?

MR. KATZ: Right -- that's what happened. Right, there was a proof of concept, but the disclosure obligation didn't change because the plaintiffs say that the defect isn't Spectre or Meltdown; it's this design choice.

And that design choice didn't change. It is on the same continuum from the time that Intel baked it into their processors in 1995 all the way to the present.

THE COURT: Well, what do you do with a circumstance where that design choice might not have been an issue if nobody assumed that it could ever be exploited, and it wasn't until either Google did the proof of concept, showing it could be exploited, that it showed that there was a defect, so we didn't know it was a defect until there was evidence that it could be exploited?

MR. KATZ: Your Honor, first of all, I would like to make clear that we take issue with the characterization of it's a defect.

THE COURT: Of course.

MR. KATZ: You're right. What happened is what ordinarily happens, which is that once it is disclosed, Intel and the industry -- bless you -- (Pause.)

THE COURT: Okay.

MR. KATZ: -- immediately swooped into action. They developed patch mitigation, and they rolled them out to protect people under the responsible disclosure principle.

Your Honor, that's no different than what happens with respect to Microsoft Patch Tuesday and any other number of security vulnerabilities that occur with respect to technological devices. If we are in a world where any time a security vulnerability is discovered, then all of a sudden we are running off and suing and saying that that's some kind of defect, there would be no end to it.

And that's what reasonable consumers know. They know that someone someday may discover that there is a vulnerability, and then the technology company, hopefully, will be able to go mitigate it with a patch. That's why we have updates to our iPhones in the middle of the night. It is a very common occurrence.

But it is counter-factual because what we're talking about here, as I opened my presentation with, the benefit-of-the-bargain theory relating to an alleged defect that has existed in continuous form since 1995.

Then they are trying to travel under one other LiMandri factor. That's active concealment.

THE COURT: And I don't even see where that is alleged, so maybe we will wait and hear what plaintiffs say that's alleged, unless you want to tell me where.

MR. KATZ: No, I don't --

THE COURT: Then we will see how they say --

MR. KAT: -- I mean, they are trying to rely on our truthful disclaimer to say that that's somehow active concealment. Your Honor's Premera decision --

THE COURT: Yeah. That can't be active concealment, but we will wait and hear what they say, if they do want to pursue active concealment, what is the active concealment? Then by all means, you'll have an opportunity to rebut and respond.

MR. KATZ: Then coming to a conclusion on the duty to disclose issue, I want to talk very briefly about reliance. One thing that really quite took us aback is the notion that plaintiff was espousing the opposition that there is only one element of reliance, even though they cite Daniel v. Ford Motor Company. Reliance, clearly under Ninth Circuit law, requires pleading both exposure and materiality. The standard stated that plaintiff must show that she would have been aware of the limited information and behaved differently.

No plaintiff here alleges viewing any Intel ad.

There is no response whatsoever to Intel's 9(b) argument, so they don't respond on the procedure or the substance, and so they haven't met the exposure element.

THE COURT: Yeah, although exposure can be derivative, can't it? Theoretically if one could show that there was some exclusive knowledge that the computer manufacturers didn't know -- Lenovo, HP, Dell -- and had they known about it, they would have done something differently. Isn't that the sort of derivative reliance that a plaintiff could benefit from?

MR. KATZ: That's not quite how I understand the exposure inquiry. The exposure inquiry is that a specific plaintiff -- here, each of the 95 named plaintiffs -- come forward and say what channel through which they would have received the information they allege was omitted.

THE COURT: Right. But I think derivative reliance can be -- one of those channels would have been an intermediate party in the manufacturing chain.

MR. KATZ: Well, could be, but they don't plead that.

THE COURT: Agree.

MR. KATZ: And that's actually Daniel v. Ford Motor Company. In Daniel v. Ford Motor Company, the exposure element was met because the plaintiffs said they got information when they went to the car dealership that the car dealership in turn had gotten from the manufacturer. That's how the exposure

element was met --

THE COURT: I thought there was another line of exceptions -- and I could be wrong -- but I thought that there another line of exception to the exposure requirement that is derivative reliance; that somebody else -- and again, I have not seen this pled -- but someone else who would have been exposed had this information been disclosed would have taken corrective steps either by further disclosing it to the consumer or by fixing some problem along the way.

MR. KATZ: Yeah, I'm not familiar, Your Honor, with that line of cases. But what I would say there is that, as we previously discussed, then all of those manufacturers would have been privy to all of this massive information that was in the public domain and would have been well able to disclose that to people.

THE COURT: Right.

MR. KATZ: So I don't think they're relying on that.

Finally, on materiality -- and I want to be quick to add that I don't think you even remotely get here, because if we are right on either safety hazard or central functional defect, these other issues, like exposure and materiality, they're moot because they don't state a claim at the threshold.

But with respect to materiality, we would submit no reasonable consumer would think that tech products are invulnerable. They all know that patching is a fact of life;

that there are going to be new security vulnerability discovered by clever people like the people at Google Project Zero and then they will be dealt with.

I would also say -- and Judge Davila does this in a number of his decisions applying common sense -- that disclosing to a consumer the design decision that they are talking about in 1995; that this is a decision that we made on speed versus security; and by the way, it is only theoretical; no one has even demonstrated it in a lab; we don't know how this could be exploited, but your processor is going to be really fast; and by the way, everyone else in the industry is using speculative execution and branch prediction, that that would have impacted the decision of any reasonable consumer.

And then --

THE COURT: It would have supported my mother-in-law's continued comment, "That's why I don't want to buy a computer"?

MR. KATZ: It could, Your Honor.

Then we have, with respect to the materiality analysis, five plaintiffs that bought in 2018, when all of the information that was claimed to have been admitted is known, and they are still going out and buying the computers. That demonstrates that it wasn't material at all; and two with the advice of counsel are going out and buying yet another device with an Intel chip. Of course, even today the chips of other

competitors are also vulnerable to cache timing/side-channel attacks. So when you wrap that all up, when they are talking about this design choice that was omitted, it is not at all material.

That's why we also point to that these vulnerabilities are disclosed routinely. Intel is not trying to hide anything. Intel discloses dozens and dozens of vulnerabilities on their website. They have been doing it since 2007, and that's in Exhibit 5 to request for judicial notice. US-CERT., in the week before Spectre/Meltdown, they disclosed 15 high-severity vulnerabilities and 217 in all, and that just ties into this is just a fact of life that reasonable consumers know about; that these security vulnerabilities are ubiquitous.

THE COURT: So on the judicial notice question, you do want me to take judicial notice of the content of what's on those websites?

MR. KATZ: Your Honor, I want the Court to take judicial notice just of the fact that security vulnerabilities are a routine aspect of modern existence, and I think Your Honor can find that from other sources. But just the fact that US-CERT disclosed 217 vulnerabilities in total, 15 of high severity, just in the week before, and Intel, just on its public website, which the plaintiffs cite to as a source, that they disclose it, that's really the only sense in which we are

asking Your Honor to take notice of it. It is just a fact that these exist and reasonable consumers know about them.

Courts, in the Ninth Circuit, they do routinely apply these principles in deciding at the motion to dismiss stage that there is no materiality. We cite the Apple Device Performance Litigation, where Judge Davila said that reasonable consumers know that increasing complexity of software puts strain on the hardware, and that, in turn, leads to battery degradation.

We cite to Williamson v. Apple, where all kinds of representations were made about the hardness of the glass in the iPhone screen, and the Court held that a reasonable consumer knows that an iPhone, when dropped, that glass can break, even if it has been reinforced.

On the change of behavior point, my last point on materiality, Noll v. eBay, I think that's an important case to judge the five plaintiffs who bought after knowing all of the information. Noll v. eBay is a Northern District case from 2013. There is no reliance where the behavior didn't change, and that behavior there involved eBay's Good Till Canceled listing policy, where people said, "Had we known there was going to be a recurring charge every 30 days if our item hadn't been sold, we wouldn't have signed up for the Good Till Canceled process," and then after bringing their case, they continued to sign up. That was the dispositive feature on the

decision on lack of materiality, and I think that we are on all fours there --

THE COURT: I understand your point there.

Back to judicial notice, though, I have read, frankly, several times Judge Koh's decision in Hauck. I have read Judge Davila's decision in Apple Processor. Those are legislative facts, the analysis, and the reasoning that they have. But you want me to take judicial notice of the complaints. What am I supposed to do with the complaints that's proper within the framework of judicial notice? You also mention in your reply that I should take notice of the amended complaint in Hauck. What am I supposed to do with that?

MR. KATZ: Judge, I think that request is not as important anymore now that we have the decisions in the two cases, of course, but it was really just the fact that this is an industry-wide issue. It is being alleged that their processors are unmerchantable. It is alleged that AMD is subject to Spectre. In Apple, it is subject to Spectre and Meltdown.

We are not asking you to reach a conclusion as to whether that's true. I think that's also inherent in the complaint that has been filed in this case. We didn't know why the plaintiffs were really objecting, because they've stood in this court and told the Court about AMD being subject to

Spectre. That was, I think, one of the reasons given by some of the lawyers to be appointed to the steering committee here.

THE COURT: Well, just to keep things, not simple, but at least sort of clean, since I have read the District Courts' decisions in Hauck and Apple Processor, and I'm allowed to, as a legislative fact, or rather for other purposes, any objection from Intel if I were to deny from the bench the motion to take judicial notice, 139, just to keep things clean?

MR. KATZ: Yes. I think it would be sufficient to just rely on the decisions.

THE COURT: Okay.

Mary, I am denying from the bench Intel's motion to take judicial notice, Docket 139. I'm not going to write about it.

MR. KATZ: Your Honor, what I have just gone through, that's the meat of the presentation. I'm happy if Your Honor wants me to, but I think that it is sort of a corner case to talk about the economic loss rule that only applies to common law fraud, the Robinson Helicopter case, or their constructive fraud claim. I'm, frankly, not sure why they brought those causes of action. I can address them really briefly. It's Your Honor's pleasure.

THE COURT: There do seem to be some exceptions to economic loss doctrine. Let me find it. Judge Koh just wrote about that a few months ago in a very interesting decision.

Yes. Arena Restaurant v. Southern Glazer's Wine. It does seem to me that there exceptions in fraud cases, or alleged fraud cases, to the economic loss rule. One of the more meaningful ones, I guess, is where there is an independent duty that is independent really of the terms of the contract. That's really, I think, what we have here.

Now, you are going to say that there is no duty to disclose for all of the reasons you've described. But to the extent that there is or might be a duty to disclose, then that is a duty that's independent from the terms of the contract; and thus, an exception to economic loss doctrine.

Am I right?

MR. KATZ: First of all, let me start with this: My understanding is that the exception to the economic loss rule stated in the California Supreme Court's decision in Robinson Helicopter, and that says that if there has been an affirmative representation and it expose to the plaintiff to liability independent of economic loss, that that's an exception to the rule. The way that the rule is implicated here in this case is because -- and I think this is important -- plaintiffs are proceeding under a benefit-of-the-bargain theory of damages.

While we are on the subject of Judge Koh, Judge Koh said in Hauck -- she actually applied the economic loss rule to bar the negligence claim against AMD.

THE COURT: Right.

MR. KATZ: So I think if we are talking about her reasoning, that's just a classic application of the economic loss rule. I don't think there is any exception that goes beyond Robinson Helicopter. I think the most salient cases are cases that proceed under a benefit-of-the-bargain theory where there has been an alleged concealment.

The other case that we cite that's right on point is Stewart v. Electrolux, which is a 2018 case from the Eastern District. That dismissed a fraudulent concealment claim because the alleged damages for the self-cleaning oven were only for economic loss, and there's no difference in this case. There is no allegation that there is harm to other property. There is no allegation that any plaintiff has been exposed to some liability that's independent of pure economic harm that's plausible in this case.

THE COURT: Well, Judge Koh's analysis was economic loss doctrine in the context of negligence. Fraud, I think, is different. Robinson Helicopter was 2004 from the California Supreme Court. There is a year-later decision in California. I believe it is Butler Rupp v. Lourdeaux where the Court states exceptions have been permitted only where a breach of duty causes a physical injury, a covenant of good faith and fair dealing is breached in an insurance contract, or an employee was wrongfully discharged in violation of fundamental

public policy, or a contract was fraudulently induced.

So I do think when you get into this fraudulent inducement issue, it is another California-recognized exception to the economic loss doctrine, which even Robinson Helicopter says, is primarily to avoid the merging of law and contract. Well, fraud has always been an exception to that doctrine, I believe.

MR. KATZ: Yeah. And I don't think that applies here. There is not an allegation --

THE COURT: Fair enough.

MR. KATZ: -- as I read it, because the plaintiffs here are pleading a benefit-of-the-bargain theory, that when we are applying the economic loss, which is to maintain the division between tort and contract, that the analysis is the same, really, whether it is negligence that's being pled or fraud by omission is being pled. I think that's the teaching of Stewart v. Electrolux. There, I believe the allegation was made that there was a potential fire hazard, even with respect to these self-cleaning ovens, and that could expose the plaintiff to liability for other economic loss. That was deemed to be not plausible/too attenuated, and the complaint was dismissed, because really what the plaintiffs were getting at there was economic harm/loss of benefit of the bargain based on an omission theory relating to a defective product. And I don't think you can have a case that's more on all fours with

Stewart v. Electrolux than this case.

THE COURT: I thought the plaintiffs -- obviously their implied warranty sounds in contract and warranty. But I thought their unjust enrichment claim more sounded in fraud, and this is where we go to duty to disclose, and I understand your arguments about duty to disclose. But to the extent that sounds in fraud, then I didn't see that as being barred by economic loss doctrine.

MR. KATZ: You mean the unjust enrichment claim?

THE COURT: Yes.

MR. KATZ: I think that's separate. I don't think unjust enrichment applies here. I mean, this is very narrow in this case, because common law fraud and constructive fraud cases should be dismissed for all of the reasons that we talked about, because of all those duty issues and the LiMandri factors that apply to those. This is just like extra, extra ground for dismissal that only applies to the common law and constructive fraud cases.

THE COURT: But I thought that any claim that sounds in fraud, especially a fraudulent inducement type of theory, would not necessarily be subject to dismissal under economic loss doctrine, as California has interpreted it --

MR. KATZ: It might not be. But just on the facts alleged here, it is, just as Judge Koh found. I would say it is here, because they are not alleging -- they're alleging

economic harm.

THE COURT: But Judge Koh threw out a negligence claim, and they are not alleging a negligence claim here.

MR. KATZ: But even if they are not alleging a negligence claim, they are still not alleging anything in their benefit-of-the-bargain theory beyond economic harm, and so that's why the rule applies.

THE COURT: No, but if the economic harm came as a result of fraud, then the economic loss rule has that exception.

Am I wrong?

MR. KATZ: I guess I don't read it that way. I read it that -- in Robinson, there has to be, first of all, an affirmative misrepresentation. But second, it has to expose the person to liability independent of the economic loss. You have to state what that is. In Robinson Helicopter, it was liability that would potentially come from accidents and from government action because defective clutches were provided.

THE COURT: Right. But I'm looking at the post-Robinson decision from California, and that's Butler Rupp from 2005, and it seems to both explain -- maybe expand -- but certainly explain the Robinson Helicopter case, and that's where the exceptions to the economic loss rule are in the four areas I've described. The first three, I don't think are applicable, but the fourth one is fraudulent inducement.

MR. KATZ: Right. And there is no fraudulent inducement theory.

THE COURT: Fair enough. But then I'm not going to worry about economic loss doctrine so much as decide whether or not there really is a viable allegation of fraud.

MR. KATZ: I think, Your Honor, you'll never get to, hopefully, economic loss because, as we've said, you haven't had a safety hazard pled. You haven't had a central functional defect pled. You haven't satisfied either of the LiMandri factors. There is no materiality.

You've to get through all of those issues before you even consider whether you have to apply the economic loss rule. We would submit there definitely isn't a fraudulent inducement claim. It is a benefit-of-the-bargain claim. So it is controlled by the rationale of Stewart v. Electrolux. I didn't read any decision of the California Supreme Court at all revisiting the explication of the doctrine as it applies to our case.

With regard to the constructive fraud case, that's, of course, a special species of fraud. Tidenberg said that ordinary consumer transactions don't apply, and the plaintiffs rely on this case of Frye v. The Wine Library where you had a direct relationship where there was a wine wholesaler that was acting as an agent for a purchaser of expensive wine and advising and acting on the plaintiff's behalf, creating a

relationship of trust and confidence. Certainly nothing like that exists in our case, or you wouldn't have constructive fraud as a special species of fraud.

THE COURT: What's your view on the unjust enrichment claim? Sometimes unjust enrichment is just a remedies theory for a cause of action, but other times and other circumstances it is viewed as an independent cause of action.

How does that fit into this?

MR. KATZ: I think the way that it fits in here is it is controlled by Oestreicher v. Alienware that says basically if your unjust enrichment claim, the foundation of it is a fraud claim, the fraud claim fails, then the unjust enrichment claim fails because there is no enrichment that is unjust. And for all of the reasons that I've talked about today, because there is no fraud, there is no duty, and all of those other reasons, and that is really the only basis for the unjust enrichment claim, it's not viable either. So I think that's how that plays out.

The cases that they cite, like Astiana or ESG, those are cases where there was some underlying tort cause of action found that was viable on which to base an unjust enrichment claim. But where you don't have that, then that claim goes out.

For a similar reason, the UCL unfair prong claim, that's simply based on the nonviable fraud claims. Under

Hadley v. Kellogg, that claim also can be dismissed. I would also point to Hodsdon, which says that there is nothing unfair about not disclosing something that one has no duty to disclose. That's something that's frequently repeated in both the California cases and the federal cases.

The unlawful prong claim is only based on the bar loss. So that brings me to the conclusion of all of the nationwide claims, and I can speak to the state claims if you want me to.

THE COURT: I don't think we need to get into that now.

Let me ask for timing -- first of all, Dennis, do you want a break?

THE COURT REPORTER: I do.

THE COURT: Since I think you are done with your opening presentation --

MR. KATZ: Yes.

THE COURT: -- why don't we do this -- will this work for everybody? Let's take a 15-minute recess now. Then we will pick up with plaintiffs' response. Depending on timing, we will go straight into Intel's reply or take a break then. We will work through the lunch hour, but that way we will be done at some point, my guess is, before one o'clock-ish, give or take.

Will that work for everybody?

MR. SEEGER: That sounds fine.

THE COURT: Okay. Let's take a 15-minute recess.

(Recess.)

(Open court; proceedings resumed:)

MR. SEEGER: Judge, what we are trying to do to simplify our response to the motions to dismiss is we did a PowerPoint. I'm not beholden to this. If you want to take me off track and ask questions -- I thought it would be easier.

THE COURT: Fine to both. Yes, we will start there, and I will feel free to take you off track.

MR. SEEGER: Also, Judge, just so you know, Rosemary and I broke up the argument, if that's okay.

THE COURT: Absolutely.

MR. SEEGER: I'm going to give you a general overview of the facts alleged in the case to make sure we're all really clear --

THE COURT REPORTER: Mr. Seeger, I need you to slow down.

MR. SEEGER: Then I'm going to address standing and fraud and omissions as it relates to the UCLR, FLA, UCL claims, common law fraud, and constructive fraud.

Is that pace okay? It is going to take a little longer than I thought because I have to slow down.

THE COURT: We will be here all week. That's fine.

MR. SEEGER: I'll do my best. It is the New Yorker

in me.

THE COURT: And then what will Ms. Rivas address? If you do overview, standing, fraud and omissions, what will Ms. Rivas be talking about?

MR. SEEGER: She is going to do unjust enrichment, the affirmative misrepresentations, and the state law, to the extent you want to go into state law.

MS. RIVAS: Actually I'll be doing the implied warranty of merchantability, the UCL, the fraudulent and unlawful prongs, and then the unjust enrichment.

THE COURT: Very good. Thank you.

MR. SEEGER: Those too.

So, Your Honor, we start from the premise that the central function of every CPU is enforcing security privileges and restrictions. CPU engineers work very hard to restrict memory access by unauthorized actors. These are sort of basic concepts. I've blown up each statement I make or references to the complaint. Some of those, I will read; some, I won't. But they are all in the PowerPoint in front of you.

Intel repeatedly acknowledged that security is an essential function of CPUs. We have allegations in the complaint that say they represented these CPUs were secure to the core. Again, designed to give the consumer device/Intel inside comfort in that fact.

Intel asserted that its processors stand out by

extending protection outside the operating system and into the hardware layer. That's critical to this case, Your Honor, because despite all of the vulnerabilities we just heard from Mr. Katz, most of what he is really talking about are software vulnerabilities -- the slide -- well, we are not supposed to be talking about tech base, so I'll put it aside. But there was a discussion about this then.

But the hardware layer is what we are really focused on in this case. These are hardware defects.

So, as designed, Intel's CPUs permit unauthorized access by programs to protected memory secrets. That's Flaw 1. That's the transient instructions coming in and Intel's CPUs delivering real values/real secrets to transient instructions.

I have to distinguish right now this case from the AMD case. AMD does not have Meltdown and Foreshadow. They don't have a Flaw 1 issue. They do have a Spectre issue. That's critical. Although even in the Apple case, where there is an allegation that the Apple chips in the Apple iPhones and iPads have a Meltdown issue, they do not have a Foreshadow issue. And I am going to talk a little bit and distinguish those cases as we go on, but we have the complaint references here.

I just went over this. This basically on this slide -- as designed, they permit unauthorized access to programs to protected memory secrets. It is Flaw 1. Here is

from -- we have shown this before. Here is our outline of what the real defects in the case are. These are in paragraphs 222 and 223 of the complaint.

Flaw 1 we discussed. Flaw 2 is what we referred to as an incomplete undo, where the processors speculatively execute instructions, but when speculative execution is wrong, the values remain in the cache, making it very easy for a side-channel attack to come in and pick it up.

Again, here is just a quick slide on what the differences are between the Intel case and the AMD case. In Intel, you get the real value, when a malicious actor sends out a transient instruction, that will ultimately be wiped out. It will ultimately be denied. Intel allows the CPUs to deliver a real value -- a secret -- photos, bank account information, even when speculative execution is wrong. It allows it to happen. AMD doesn't have that issue.

Now I'm not going to go into these. These were the demonstrations you've seen before about how the values go to transition instructions, and then even when the instructions are wiped out, they leave the secrets in the cache.

Intel was aware that its CPUs allowed unauthorized program instructions to access protected secrets. We have that in the complaint. We've referenced the complaints, 246 and 256. And I won't go into this. It is a lot to read. But again, it is a restatement in the complaint. It is an

allegation in the complaint as to exactly how these defects come about.

And they were aware that they were designed, which allowed secrets to be placed into the cache by unauthorized users presented substantial security risk to consumers. While they hid that information from the consuming public, these vulnerabilities pose a severe security threat in various patent filings that we have gone and read again -- again, not something a consumer would go and look at. You can see that Intel is concerned about this.

I want to make something else very clear, Your Honor. There was discussion earlier about what we say in the complaint about when the defects occurred. Flaw 1, we believe, came -- we have no discovery in the case, so again, subject to that. Flaw 1, we believe, arose around 2006 when Intel decided go to this multi-core processors. It might have been in there from 1995 in Flaw 2. We don't know that for sure. We know they are there now, but we believe it was 2006.

We also have alleged that Intel was aware that its hardware design could be used to leak privileged information and even claimed knowledge and awareness of means to modify its chip designs to prevent such attacks. We see that in the patent filings. Why they were never implemented, we will find out in discovery, but we have alleged those details. It's very important.

THE COURT: So what do you contend Intel should have disclosed in 2006?

MR. SEEGER: Well, I mean -- it is clear that Intel knew at that point that they had what we refer to as a "leaky cache." It is clear that they understood in 2006 that speculative execution, when it goes wrong, was still going to get real values. It was still going to get real secrets. At that point in time you would think that there would have been a focus on either disclosure or correcting the problem early. But they didn't do that. They touted -- we believe what was going on is there was a chip war mostly between AMD and Intel, and Intel had touted its computers and its processors as being the fastest.

THE COURT: I understand. What should they have disclosed to avoid what you now contend is their liability for omissions?

MR. SEEGER: Okay. So they understood that there were the defects there. I think at that point in time we've alleged that they understood that there was this thing called a side-channel attack. If you remember, the way we characterized the side channel attack, it's making the information available for the malicious actor to come in with the side channel and take the information out. So we believe those two things put together, that a responsible chip manufacturer would have made consumers either aware of these defects or corrected them

immediately.

THE COURT: So assuming that they didn't correct them immediately because they had their own reasons, probably performance-related, you're saying that if they are not going to correct them, they should have disclosed that there was vulnerability to side-channel attack creating potential exposure --

MR. SEEGER: Of your secrets.

THE COURT: -- of secrets.

Now, wasn't that known by the computer architecture community outside of Intel based upon a number of the articles and papers and conferences that you have cited and referred to in the complaint?

MR. SEEGER: We don't think so, Your Honor. I'll tell you what we think might have been known at that point in time, and I think we have to look at this at different points in time. But we don't think there was any knowledge by anyone outside of Intel about Flaw 1; that is, returning real values to transient instructions.

Now, maybe people who study this stuff at the academic level and maybe the company internally in their patent filings were focused on that, but we don't think there was anybody outside of Intel that was aware of that. We think, once again, without discovery in this case, what supports that is the fact that no other chip manufacturer has the problem

with Flaw 1, the real values to transient instructions, that Intel has today.

Now, when Intel says that this is an industry-wide problem, they must be referring to Spectre, which is what we call the Flaw 2 design, the incomplete undo, because, yes, it does look like there is an industry issue with Spectre, but not with Meltdown, not to the extent that Intel has it, and clearly not with Foreshadow.

By the way, Your Honor, if I could just make one little point which we think is important. We've spent a lot of time since the case has started talking about Spectre. While we were talking about Spectre in June, Meltdown was coming into the picture. Since June, we've now learned about Foreshadow, and there are variants there.

Intel pushes out patches that they tell their consuming public to download, and each of those patches have an impact on performance. We don't know what's around the corner. Until this is corrected, the patches don't fix the problem. I have a slide on this. I don't know if it is coming up next.

Intel itself has acknowledged that it is a hardware problem, and they have promised to design and ship out a new CPU. It hasn't happened yet. But that's where the fix has to occur. Otherwise, there will be -- with the new variants that are coming and the new exploits that we will be learning about, people will be downloading patches, and they will continue

having an impact on performance in the future.

I have a few slides, which I'll go through very quickly which deal with the patches and the mitigations that's recommended by Intel.

THE COURT: If I want to write down what specifically should have been disclosed about Flaw 1, not Flaw 2, but Flaw 1, could you articulate that once more for me so I can write it down precisely? What should have been disclosed about Flaw 1, given that they chose to leave that flaw in place?

MR. SEEGER: Again, I'm not a marketing person. I don't write disclosure letters.

THE COURT: No, but you're claiming liability by omission. I want to know specifically what was omitted that should not have been omitted.

MR. SEEGER: I think what specifically should have been omitted is that Intel's computers, like others, has out-of-order execution, speculative execution. But what they don't have is that while those things are -- that secrets that are in the computer's memory could be made available to malicious attackers using certain kinds of attacks, side-channel attacks.

THE COURT: But doesn't that describe both Flaw 1 and Flaw 2?

MR. SEEGER: No, because Flaw 1 and Flaw 2 are the defects that allow side-channel attacks to be successful. They

are not themselves side-channel attacks.

THE COURT: So this omission that you've just described is the same omission that was at stake in the Hauck case and the Apple case, right?

MR. SEEGER: I don't think so, Your Honor. I did not think a Flaw 1 allegation was made in either one of those cases.

THE COURT: So articulate for me what is the omission that makes this case different from the Hauck case and the Apple Processor case. What is the omission here that is at issue that they should have disclosed that shows this case is different from either the Hauck or the Apple Processor cases?

MR. SEEGER: I mean, now is a good time to do it. I will first answer your question, but I think now is a good time to talk about what was going on in those cases and maybe the points that were missed by the plaintiffs in those cases.

But yeah, what we put in our complaint is --

THE COURT: Which paragraph are you referring to?

MR. SEEGER: I'm now looking at paragraph 408g.

MS. RIVAS: It is from the complaint. That's through all of the causes of action.

THE COURT: You said paragraph 408?

MR. SEEGER: No. I'm sorry. It is from the -- I think it is from our brief.

MS. RIVAS: No, it is from the complaint.

MR. SEEGER: It is 408g.

THE COURT: One moment. Let me get to that.

All right. So 408g reads, "Concealing and/or failing to disclose material facts, including but not limited to: That in designing its CPUs, Intel failed to take measures to protect confidential information from attacks by unauthorized users while knowing its CPUs were vulnerable to attacks."

So I guess if that's what the claim is, are you telling me that you've alleged also that failure to disclose, that information that was not disclosed, was not known generally among the computer architecture experts outside of Intel and that somehow that particular failure is different from what was at issue in the Hauck v. AMD case and the Apple Processor case?

MR. SEEGER: Right. And just to remind Your Honor, in the Hauck case, the Court's problem with the complaint in that case is they didn't allege defect. This is what the Court said -- that they alleged 20 years of vulnerabilities, but they didn't specifically allege defect. I don't think there is any doubt that in this case we have specifically alleged the defects.

THE COURT: And the defect that you are specifically alleging, to be precise, is what?

MR. SEEGER: It is in paragraph 222 of our complaint.

THE COURT: One moment. Let me get there.

All right. I am at 22. What's the defect?

MR. SEEGER: What we've alleged -- and I'm paraphrasing because I don't have the exact complaint. If you read what's in front of you while I say this, I think you will see. The first half of the paragraph discusses what we call Flaw 1, which is Intel processors allowed program instructions to have unauthorized access to protected data.

The second half of the paragraph, I believe, lays out what we've now called Flaw 2, and that's incomplete undo. Intel processors speculatively execute instructions. But when speculation is wrong, the effects of those instructions are not completely unknown.

Now, I know I just paraphrased the paragraph in front of you, but that's what we alleged.

THE COURT: All right. So now -- you don't need to read that. I would just like to know, so it can end up in an opinion and order, what's the defect?

MR. SEEGER: So the specific defect is that -- I mean, I don't know if I can describe it any better than I have.

THE COURT: You're welcome to phone a friend, but somebody has got to be able to articulate for me what the alleged defect is.

MR. SEEGER: Other than what I have said, so I haven't done it obviously.

THE COURT: Then you can repeat it, and I'm going to

take it down word for word.

MR. SEEGER: Okay.

THE COURT: So you were first directing me to 222.

MR. SEEGER: Yes.

THE COURT: Then you were paraphrasing it. What you said doesn't match up that closely with what's in 222. So now I just want you to tell me, from plaintiffs' perspective, what's the alleged defect?

MR. SEEGER: Your Honor, if I could, I'm going to pull up paragraph 222, and I will walk through it and point out which aspects of it relate to what we have identified as the first defect and then the second, if that's okay.

THE COURT: Okay.

MR. SEEGER: Because I just think it is important.

THE COURT: Take your time.

MR. SEEGER: Paragraph 222 in the complaint reads -- I'll go to the second sentence, because the first one talks about Intel sacrifices.

"Specifically, and as explained here, Intel's implementation of Dynamic Execution created security vulnerabilities within its CPUs, rendering them defective. For example, Intel undermined the security of its processors by implementing, that's out-of-order execution and speculative execution in a way that (i) created windows of time during which an unauthorized user could have the processor make

unnecessary or unauthorized memory access to copies of sensitive or privileged information." We have referred to that as the first flaw, Flaw 1. That's Meltdown and Foreshadow. That's returning secrets to the transient instruction, in English.

Then the second part of that, "(ii) allowed that information (or critical data about the location or contours of that information) to remain in the CPUs' caches after the mistaken or unauthorized access, (for example, an exception) was discovered." That is what we have referred to as Flaw 2. That's Spectre, Meltdown, and Foreshadow.

THE COURT: And the plaintiffs' allegations are that, in order to avoid liability under an omission theory, if Intel was not going to shut down or fix these flaws, then you're saying they should have disclosed that, as you say, "By implementing out-of-order execution and speculative execution," and the way that they've done it, "Intel created windows of time during which an unauthorized user could have used the processor to make unnecessary or unauthorized memory accesses to copies of sensitive or privileged information."

So that's what they should have disclosed. You are telling me that's what you are alleging that they have not -- that was not generally known, at least among computer architecture experts, and that's the first basis of the failure to disclose or the first defect that was not adequately

disclosed?

MR. SEEGER: Correct, Your Honor.

Then to just try to answer it -- I am going to take another stab at what would the warning be. They could have said, "Our chips expose user information to unauthorized program instructions after the program is determined not to be authorized."

They could say, "Our chips do it differently than AMD, so you have a problem. We may all have this issue, but this could be a problem and that your secrets could be revealed," because at that point in time I think most consumers were choosing between Intel and AMD, the two leaders in the field.

Your Honor, from here, unless you have any more questions on that point, I'm going to quickly go through, again, on the facts, the mitigations. There are multiple mitigations needed. By the way, I think an issue that goes to the materiality of the defect is that Intel is telling all users of Intel chips that they must download these patches. It is to fix a problem that related to what we have identified as a defect.

I'm going to skip to standing, because that's what we will get into some of the cases that I think Your Honor may want to discuss.

Your Honor, from our perspective -- we understand

that Intel's contention is that the claim that consumers overpaid for devices containing Intel chips is not sufficient for Article III standing. We obviously don't agree. We have got a number of cases -- Hinojos and some that we have spoken about. In re Chrysler-Dodge-Jeep Ecodiesel Marketing case for overpaying for goods on account of a manufacturer's misrepresentations or omissions satisfies the injury in fact causation requirements.

We allege plaintiffs' CPUs suffer core defect or central defects, we could call them, because that relates to other tests we will be talking about, reflecting Intel's design decisions to gain performance at the expense of user security. That's unauthorized access, Flaw 1, and incomplete undo, Flaw 2 that we just discussed. And these are our allegations in the complaint that support that.

Some of the discussion with Mr. Katz earlier almost sounded like summary judgment type issues, because we think a lot of these issues are fact issues that have been discussed.

Let me speak briefly about some of the cases. The biggest case they rely on standing is Birdsong case. The problem with Birdsong, from their perspective -- and there are many problems with it. One, it involves an iPod where the plaintiffs in that case claimed could cause hearing problems. The Court really kind of looked at that, I believe, in reading that case, almost like a silly case; you could just turn the

volume down on the iPod. There was no defect there that related to the central function of the iPod in question. The risk that they talked about was purely speculative.

So, again, it is kind of a silly kind of case -- and I don't mean silly in the sense that Mr. Katz is silly. It is kind of a silly case, though, because I don't think it really applies here at all. It is a consumer misuse case. People were hurting their ears -- some people, not even all. It wasn't even an allegation that everybody suffered ear injury. Some users kept their iPods up too loud and hurt themselves.

The other case that they rely upon is the Cahen case. Again, that's a case that involved Toyota cars that had electronic control unit. Now, the Court, when you look through that case, says that almost every car on the road has these electric control units in them. And even though there is this theoretical risk of hacking, I think you have to look at that. And there is language in the opinion, although I'm not saying that the judge in that case said it was the most important language, but the hacking we are talking about is driving information. It is almost -- it's not secrets. It's not photos. It's not letters. It's not your account information. So the people in this case bought a car, and at the end of the day they had a car with this speculative risk of hacking -- your driving information. I just don't think the Court bought that this was really a central function of what people were

purchasing.

THE COURT: It wasn't hacking that some nefarious entities could take over your car and cause an accident; it was just that they would know where you were?

MR. SEEGER: There is a mention of that in the case. Again, the Court refers -- I think the plaintiffs alleged that, and the Court said it was a speculative risk. I don't remember from the case if there was any conclusion as to whether that was a real risk or that really happened.

THE COURT: Well, since we only have a proof of concept here on Flaw 1 or Flaw 2, how is this not a speculative risk?

MR. SEEGER: Here is the biggest problem that they have with that argument, and, this, we do allege in the complaint. There is no fingerprint that's left behind for any of these exploits. We don't know -- you wouldn't know it, Your Honor, if you had been hacked by some malicious actor who opens up an Amazon account. Let's say you are on Amazon. They open up an Amazon account. They now have access to the system, and they send in a malicious code, which then starts running on all the computers that are on the Amazon system. You just wouldn't even know if you had been hacked. I know we are not supposed be referencing science today. I think we can for our own use. I am not using anything they said. But Professor Conte had explained that there would be no

fingerprint left behind, and we alleged that in the complaint as well.

THE COURT: Assuming that's accurate, though, how does that take us out of the range of speculative risk? How are you going to prove that there is a non-speculative risk?

MR. SEEGER: I think the best way to prove it is by Intel's conduct. Intel is telling everybody who has their chips to download patches. Those patches impact the very thing that made them famous and rich; it's the speed of their processors. Why would Intel interfere with this processing speed of their computers if they thought that there was really no risk here; if this was only a proof of concept? It kind of stretches the imagination a little bit.

So Intel clearly believes there is an issue here. Intel's patents' applications suggest they thought there was an issue here. I mean, I think that's the best answer I have.

THE COURT: Is there an inconsistency in your position that standing comes from an overpayment and also your position that this is a core or fundamental defect, because if something really seemed to me to be a core or fundamental defect, I wouldn't buy the product or expect anyone would buy the product. But if someone would buy the product, but at a lower price, then it doesn't seem to be a core defect or a fundamental defect that basically affects the ability of the thing to operate at all.

Is there an inconsistency there?

MR. SEEGER: I don't see it.

THE COURT: Why not?

MR. SEEGER: There is interesting language in the Hinojos case, which addresses that, I believe. I think that's the case where they say that price is a very important factor. It determines the status of a product. It suggests a lot of things about it.

Now, I'm not saying -- I don't think we've alleged that with a lower price, we would have bought these chips. I think what we've said is they didn't get what they paid for, and so we've overpaid for them in that respect. I don't know what the price point is where our plaintiffs would accept the defect. It may be some price point, but it is not what they purchased the product for.

THE COURT: I thought the theory of an overpayment is: We bought something, and we paid X dollars for it, but had we known its true features, we would have only paid Y, and that delta between X and why is our overpayment. Now, if we really do have a fundamental or core defect, we wouldn't have even paid Y. I'm not going to buy a car that doesn't work, no matter how cheap it is.

MR. SEEGER: Well, you are not going to buy a car that doesn't work, and I guess your point is you wouldn't buy a computer chip that doesn't protect your security because that

doesn't work either, so then the overpayment is the full price for what they purchased.

THE COURT: By the way, let's get to it now then. Why do we have a certain number of plaintiffs who purchased these computers with these chips after knowing of the flaws and even a few after filing a lawsuit?

MR. SEEGER: I'm a little befuddled by that too, because I think Mr. Katz has made a little too much of that. First of all, from our understanding of what our plaintiffs did in this case, they still have the defective computers, but they went out on their own and covered. They bought a new computer. So I guess the question is --

THE COURT: With the same flaws.

MR. SEEGER: Well, this is what I'm saying -- this issue about with the advice of counsel, I'm not really clear what Mr. Katz is talking about there.

But we do have a handful of consumers who went out and bought another computer, because they don't know what the defect is. They do not understand exactly what's going on, and I don't think they have an understanding of what the distinction is between an Intel chip and an AMD chip.

They may believe that this is the best they're going to get, but they are replacing their older computers because -- one thing I also have to point out, the older computers are more impacted by the patches than the newer ones. And you are

going to be more impacted if you don't have PCID. I don't know if you remember the discussion about that.

THE COURT: I remember the discussion of it; I don't remember what it is.

MR. SEEGER: I actually wrote it down somewhere. I forget. It is something-ID, but I forgot what the acronym stands for. But it is an added level of protection for your computer. Those computers seem to be -- if you implement the PCID, and you download the patches, your performance is still impacted, but not as greatly as computers that don't have PCID, which is probably half the class in this case.

THE COURT: So the consumer class -- putting aside some of the entities, does the basic consumer class even notice the difference in performance? Do we know yet?

MR. SEEGER: Yeah, they do. Are you going to notice it if you are just maybe doing one thing. But many people open up various programs on their computer and have them going at the same time. In that instance, after these patches are downloaded, we believe that you would notice an impact. So a lot of people -- and I don't mean this in a pejorative way, because a number of people are kind of computer geeks. Many of our clients are, and they really pay attention to boasting about performance. They want the fastest chip. They want the most efficient computer. They want to be able to run many programs at one time or to want stream video while they have

other things going on. Yeah, there are impacts on it.

THE COURT: I have no idea whether this will or will not have an impact if we ever get to class certification, but I'm going to utter those words right now so I can find this conversation again down the road.

MR. SEEGER: I understand, Your Honor.

On the standing issue, look, other than just to summarize that when a manufacturer sells a defective product which causes consumers to be misled at the point of sale -- and that's what we believe. We believe they knew about the defects. It wasn't disclosed at the time they sold it to the consumers, the consumers didn't know. Because of that, they paid more, and they got less than they believed they were purchasing, and the consumer suffered.

Your Honor, at this point, I would slide on down --

THE COURT: Do you want to briefly address standing to seek injunctive relief. I know Mr. Katz didn't mention it, but it is in their brief.

Do you want to respond to that?

MR. SEEGER: Yes. I think our position is the injunctive relief would be providing the notice that we are talking about to the consuming public about their chips and the defects.

THE COURT: But the notice is now out there, right? The information is now out there. So what more injunction

would be appropriate? Or to be more precise, why is there standing to get future injunctive relief?

MR. SEEGER: Your Honor, I guess I would have to disagree slightly with the "notice is out there" concept. We talk to consumers all the time. They are totally not aware of what's happening. They are not up on the latest trade publications about Spectre, Meltdown, and Foreshadow, and if they see those words, they wouldn't totally understand them. I think a lot of people think that this is the kind of software hacking that you get or the vulnerabilities that come from software programs, and that's if they even had a basic understanding.

I can tell you -- and this means nothing other than my -- not that it is important to Your Honor. But when I first got involved in the case, the learning curve here for me was extremely high. So when you talk about whether a consumer understands this problem right now, I really doubt it.

THE COURT: So then if a consumer would have been told at the time of purchase that these processors, by implementing out-of-order execution and speculative execution, do so in a way that creates a window of time during which an unauthorized user could have the processor make unnecessary or unauthorized memory accesses to copies of sensitive or privileged information -- and I'm quoting from the complaint at paragraph 222i, would that have made a bit of difference to a

consumer; and if not, how is it material?

MR. SEEGER: Well, that does relate to our issue on the injunctive relief because we believe that if notice -- again, if notice is going to be provided, it should be provided in a way that a consumer would understand. I don't think a consumer understands anything you just read, Your Honor. But I think a consumer would understand that your secrets may be susceptible to various exploits that take advantage of defects in the Intel CPUs.

THE COURT: Now, if we're going to -- and this is what is making it difficult, taking a consumer protection environment case or context on a fraud claim -- what should the consumer have been told? That's what I asked you a few moments ago. The answer you gave me was paragraph 222. I think we now both agree that had a consumer been told that, it wouldn't have meant one thing to that consumer.

Now what you are saying is, "Well, what they really should have been told is that no computer is free from vulnerability; every computer can be hacked." Okay, fine. They were told that. Everybody knows that. So then you go to, "No, they should have been told a little bit more so that a normal consumer would understand it and be motivated by it."

But when I asked what that would be, and you gave me the 222, now we both agree that no consumer would understand that, except a subclass of technology specialists.

MR. SEEGER: Yes. Your Honor, I apologize for being confusing on this. I actually did -- I have it in front of me now. I said something a little bit different, so do you want me to say it?

THE COURT: Whatever you want; whatever you want.

I'm just trying to understand what Intel should have done under plaintiffs' theory to avoid liability, and I'm not going to accept simply, "Oh, they never should have put the product in the market in this fashion." I think they are entitled put a product in the market that balances performance with security, theoretical vulnerability.

I'm hearing you say, "Well, then they at least should have disclosed that." Okay. What precisely should they have disclosed? Then when I thought we had made progress, and you told me what they should have disclosed, we then ended up in a situation where "but no consumer would have understood that."

MR. SEEGER: No consumer would understood paragraph 222. I also did earlier -- I read something, which I thought notice -- I guess could be what notice would look like. If you remember, I was reading language that said our chip exposes users to unauthorized program instructions after the program determines it not to be authorized.

Other chip companies do it differently and more securely. No competitor is going to say something like that. But other chip companies do -- and I'm doing this on the fly,

because I didn't anticipate this question.

THE COURT: You didn't anticipate that I would be asking what is the specific omission that they should have disclosed?

MR. SEEGER: I did. But when I pointed you to 222, and I said "Flaw 1" and "Flaw 2," I wasn't connecting with you. I think you were looking for some more of a "give it to me in plain English."

THE COURT: Well, yeah, because I'm thinking if this is a consumer protection, because it is not a personal injury case. It's a case where you are saying the consumers bought a product without being given adequate information. I understand that there is no allegation of an affirmative misrepresentation. I don't think I've seen any allegation of active concealment, but I'll let somebody talk about that if you want to. So it's an omissions case.

So that makes me want to ask, what should have been disclosed to avoid omissions liability?

MR. SEEGER: I think the answer -- and I hope this doesn't sound like I'm trying to oversimplify it -- would be Intel prides itself on processing speed. "We have figured out a way to make our processors faster than everybody else. The problem in doing that, we have sacrificed some chip security, and you should understand that we do things a little differently than other chip manufacturers. And some of your

secrets could be made available to an attacker using a certain kind of attack, although we haven't seen a lot of it," I mean, even something like that.

I think that a purchaser of a computer would look at that and say to themselves, "I want to know." That would be important information.

THE COURT: Are you saying that you have alleged or can allege that Intel knew about that before it was disclosed in 2017 by Google Project Zero?

MR. SEEGER: And we absolutely allege that in the complaint. We allege it by pointing to their patents that anticipate the problem we are now talking about. We do it by talking about White Papers that were available to the company. We referenced manuals that go back -- Intel manuals to programmers that go back to 2014, maybe 2012, discussing this particular problem. Yes, we absolutely allege in the complaint, and I think very clearly, that Intel knew about it before 2017.

THE COURT: And for purposes of both standing as well as basic whether the computer is fit for its ordinary purpose or there is a fundamental flaw, how does one distinguish between, yes, they knew of that as a theoretical vulnerability, and even until 2017 there hadn't even been a laboratory proof of concept, and as of right now there is a laboratory proof of concept, but we don't know if it ever has been done or even

could be done beyond this proof of concept.

How does the law decide at what stage this theoretical vulnerability has to be disclosed and what's the extent of the required disclosure?

MR. SEEGER: I think that what the law should look at is what Intel knew and when they knew it, and we don't have that discovery. We have just alleged that in the complaint, but we believe we have adequately alleged that -- we have reason to believe that Intel knew -- and not should have known -- knew of the potential defects well in advance of 2017. And we think that's when the issue should have come to light.

THE COURT: What I'm struggling with is to understand, when you say "defects," what I'm hearing from Intel is that these were -- and even maybe from you -- is that these were certainly theoretical flaws that may or may not be able to be exploited. And now as of 2017 we have some analysis that shows, yeah, under the right circumstances, they could be exploited, but we don't know how likely those circumstances are.

At what stage does the law say your failure to disclose all of that is actionable? How do we decide that?

MR. SEEGER: I think that the answer to that, Your Honor, is when Intel became aware that these defects could be exploited, they had an obligation to inform the consuming public of it. The reason is -- and it doesn't relate to

whether we know for sure somebody has been hacked. As I said, our allegations right now, and we believe the discovery is going to show that there is no fingerprint here, and these hackings could be going on all over the place, and you wouldn't know.

But what we do know about this case is that Intel is requiring everybody with an Intel chip to download protections that disable core functions of its microarchitecture. Just one example of why this is important, Your Honor: Hyperthreading. That is a core feature of a processing chip. One of their recommendations is basically to disable that so you can't run multiple programs. I mean, that's a core feature of their product. Once it is disabled, the impact will be substantial. We've alleged up to 30 percent performance --

THE COURT: Let me go to something you said about a minute ago, and that was when they knew about it, they had a duty to disclose to the consuming public.

Is there a distinction between a duty to disclose it to the end users in terminology that your end users might be able to understand versus simply to disclose it to the marketplace? In other words, to disclose it to the manufacturers: The Dells, the Lenovos, the HPs, to the academic community, to the professional industry conferences? If they disclose it there, why isn't that sufficient, given that the likelihood of an individual consumer understanding

that doesn't seem to be particularly plausible to great.

MR. SEEGER: And here is why: Because they chose to market their important component part directly to the consuming public. They took their case to them, and I can give you an analogy to another area of the law, not totally on one point, but it is just one way to think about it.

When pharmaceutical companies advertise directly to consumers, they take the doctor out of the picture. In most personal injury cases, the doctor reading a label is a defense. In most courts they lose that defense when they take their case directly to the consuming public. I think that's a very analogous situation right there. If the component part manufacturer is saying, "Buy a computer with Intel inside, because we are the best, we are the fastest, we are the greatest," that's who you need to be communicating with. You can't start the discussion and end it when you feel like it, which is, "Oh, and by the way, we won't tell you about our defects; we will just tell Dell," which there is no evidence that they did. I am just working on the hypothetical.

THE COURT: All right.

MR. SEEGER: Your Honor, I will move on to consumer fraud, if that's okay, and then that will leave time for Rosemary. I have taken up a lot of time.

So Intel says we can't make a claim for fraud by omission. I believe that we have adequately alleged that.

Plaintiffs' claims under the CLRA, FAL, and the fraudulent prong of the UCL are governed by the reasonable consumer standard, which looks to whether a defendant's practices would deceive an objective, reasonable consumer. Whether a reasonable consumer is likely to be deceived is a question of fact, Your Honor.

The CLRC, FAL, and UCL claims may be based on misrepresentations by omissions. There is plenty of law on that. Hodsdon is one of them.

The elements of a fraudulent omission claim under these statutes, are the same as common law fraud.

THE COURT: So when I analyze those statutes, under a theory of omissions, do we then also implicate the Wilson standard for the duty to disclose, which seems to require some safety defect?

MR. SEEGER: Your Honor, I think that the current law in the Ninth Circuit is pretty clear, and it is stated in Hodsdon, which is that the defect has to be material, meaning it would have to be something that's important to the consumer, and it has to relate to a central function.

Then you need one of the LiMandri factors, which we've alleged two. I heard you in questioning Mr. Katz -- I think you were a little on the wall with regard to one of the factors that we alleged, active concealment.

THE COURT: Yeah. Where is the active concealment?

I must have missed it.

MR. SEEGER: Your Honor, it is not that you missed it. We have it in our -- I'll point you to the complaint.

THE COURT: Are you saying it is the statement that there is no such thing as perfect security?

MR. SEEGER: No.

THE COURT: Then you can tell me what's the active concealment.

MR. SEEGER: If you don't mind, I'll skip ahead.

THE COURT: Okay.

MR. SEEGER: Active concealment is on page 49 of the PowerPoint we gave up to you. We've alleged Intel actively concealed that its CPUs gave unauthorized program instructions, access to protected data, and failed to completely undo mis-speculation. So that does relate to the defect, but that would be -- our view is they actively concealed that information.

THE COURT: One moment. Here is what I understand to be active concealment, and I base this in part on my Premera opinion, plus the cases in there, that you actually have to do something that, if you will, send someone looking in the wrong direction, on a wild goose chase; or if there's a vulnerability or defect here, you have to cover it up and disguise it so they won't see it. That's my understanding of what active concealment is. It requires one of those two: Either go look

somewhere else, or I'm going to cover up the concealment. You can have either one.

What did they do here that fits within that description?

MR. SEEGER: I think what we are alleging fits more in -- advertising their product as secure to the core; one of the safest; that our safety protections extend into the hardware. Those kind of representations, I think, were, in our view, active concealment.

THE COURT: I might understand it if you said, "That's a misrepresentation or a half-truth," although then we would be getting into a little bit of the law on puffery and objectively verifiable or refutable statements.

Where is the concealment part? If they say that their processors are among the safest in the world, okay, maybe that's not really true. It is a little puffed. Maybe it is a half-truth. Okay. But where is the active concealment? Where are they making it more difficult for someone to learn what the omission is or what the defect is?

MR. SEEGER: Okay. Your Honor, if the question is what have they affirmatively done to make it more difficult to find it, I would say we probably have not alleged that in the complaint in a way that would answer the question.

THE COURT: Okay. And I'll agree with that.

MR. SEEGER: I think that if you wanted us to, we

could probably -- I think maybe even after we get some discovery, we might need for that.

THE COURT: Okay. Then move on to active concealment.

MR. SEEGER: I mean, for the purpose of -- we only need one of the LiMandri factors --

THE COURT: I agree.

MR. SEEGER: -- so why fight on the second one?

THE COURT: Okay.

MR. SEEGER: But exclusive knowledge of the defects, I think we've discussed that. We've alleged in the complaint that the defects -- that they knew about them; that they had exclusive knowledge concerning the hardware design; deferred privilege checks; permitted unauthorized memory access, and thus compromised security to achieve it.

THE COURT: So where's the evidence and/or plausible allegation that they had the exclusive knowledge, in light of all of the things that were said to the academic conferences, the White Papers, and even the patent filings?

MR. SEEGER: That they had exclusive knowledge?

THE COURT: Yes.

MR. SEEGER: Well, first of all, nobody has access -- as far as I know, to this day, nobody has access to their algorithms and the information that they have. I think that what the academic community does is they kind of try to

reverse-engineer this. In terms of exclusive knowledge -- more importantly, only Intel knew about Flaw 1. Flaw 2, maybe -- if you look at the papers, I think they are focused more on when speculation execution is undone. They don't undo the values that they put in the cache. But Flaw 1, I don't think any of those papers that we allege in our papers, or anything that Mr. Katz has said, indicates that somebody else knew about that other than Intel.

THE COURT: Okay.

MR. SEEGER: I could go into the duty to disclose, Your Honor.

Do you want me to go through that?

THE COURT: Well, one of the threshold points on the duty to disclose is the central functional defect.

MR. SEEGER: Right.

THE COURT: And let me tell you this and figure out, how do I apply this? I'm not going to make myself a witness in this case, but I'll say this: Okay, I've now gone through your -- both sides' tutorial. I probably now understand what the alleged defect and flaw is better than anybody other than the technical people out there in the industry.

Let me rephrase this. The lawyers in this case understand it much better than I do. The technical people in the industry understand it much better than I do. I probably understand it now better than your average typical consumer,

not your specialized technology geek, but your typical consumer.

Now that I understand it, if my computer crashes and dies or I lose it or something, would I have the slightest hesitation buying a new one? No.

What do I do with that fact?

MR. SEEGER: I'm surprised you say that, Your Honor, to be honest with you.

THE COURT: Maybe I'm just wrong and maybe I don't really understand the flaw. I see the theoretical vulnerability here. And maybe it is also because now that I live my life as a federal judge, everything that I do out in the community I assume the news media is watching. By the way, I know they are not. But everything I do I assume could end up front page news, and I act accordingly. So I now lead a very boring life.

But I assume that we are vulnerable being hacked in the courthouse. And notwithstanding our security measures here, there is a theoretical possibility that we can be hacked here, and I could be hacked at home on my computer at home. I just live with it. I deal with it. I, frankly, ignore it.

So how does this flaw show that there is a central functional defect with this product?

MR. SEEGER: Your Honor, first off, I'm actually not surprised -- and I know that you're trying to trigger some

discussion here. I wonder if you really would go out and buy another Intel computer knowing that AMD doesn't have a Meltdown and Foreshadow problem, and you're going to pretty much get similar performance. I'm not questioning you on that so --

THE COURT: Let me ask a really basic fundamental question and show how little I know.

Are Intel processor chips in Apple MacBooks?

MR. SEEGER: They are, yes.

THE COURT: Okay. Because my kids recommended an Apple MacBook for my home computer and said that's the best to work with, and I think I remember seeing one of those little Intel logos on that. That computer has worked out just fine for me, and I really do think if I were to lose that computer or it were to break for reasons that have nothing to do with this case, I would probably buy a new one, just the same kind.

MR. SEEGER: Well, you say it has worked out fine for you, but I don't think you would feel that way, Your Honor, if you found out that your bank account information and your Social Security number and your password are sitting with somebody else, who might have come in through one of these exploits.

THE COURT: I agree. But there are also so many other ways in which it could have come in too. I get a call probably every two or three days telling me that they're either from Microsoft security, that my computer has been hacked, and

I need to log into this particular website, and they will fix it for me.

MR. SEEGER: But can I separate that out a little bit?

THE COURT: Yes.

MR. SEEGER: So you have got one instance where you have bad guys out there trying to get people's information, and they figure out all kinds of ways to do that. That's a problem that we all have. But in this case you have a computer chip manufacturer who planted the defects, put the defects in the chip so that they could make a faster processing system, knowing that those defects were problematic at the time. That's our allegation in the complaint.

Look, this is a pre-discovery case --

THE COURT: Yeah, I understand.

MR. SEEGER: But we believe these allegations will be borne out.

THE COURT: What does the law tell me in terms of how I define a central functional defect so I can then look at the fact in this case and say do we have an allegation of a central functional defect?

MR. SEEGER: I think it goes to really what the core feature in a product; you know, an engine in the car that we talked about, BMW, where the engine had issues. It smelled. It gave off all kind of sounds. That sounds like something

that relates to an engine in a car. It sounds to me like it would be a central function. I could see a court saying that's a central function.

THE COURT: And I find that true with my computer. My computer still does all the things I want it to do.

MR. SEEGER: I think of it like this: I'm staying at a hotel a couple of blocks away. I lock my door. There is a safe there. I put my watch in the safe. I assume that when I do that, it's safe. I don't think that there are going to be people from the hotel who are going to come in, know the code, and take my stuff.

I think that's a pretty important feature. Security in a CPU, security in a computer chip, is really everything. So why would anybody knowingly put their most private information into a computer's memory knowing somebody can access through the CPU and get it?

THE COURT: So following up your analogy to the hotel room, and I think it makes sense. One would normally think of the central functional purpose of a hotel room to give you a good, clean place to sleep at night. But if you knew that this particular hotel had rampant theft going on either from employees or from outsiders that they let in so that you had heard so much about people breaking into rooms, or when the guest isn't there, stealing stuff from them, you wouldn't use that hotel anymore.

MR. SEEGER: That's correct.

THE COURT: Okay. So security in that respect could be a central functional defect for that hotel.

But now what do we do with the fact that people continue to buy Intel chips and Intel processors, and, if anything, it looks like their sales are going up?

MR. SEEGER: Your Honor, grant the injunctive relief we asked for, we will get notice out to the consumers, and we will see if that's true. I really do not believe to my essence that a consumer who understands that there is another computer chip manufacturer that doesn't have this Flaw 1 problem of returning real values -- remember, AMD returns a dummy value to transient instructions. And when speculation is wiped out, the real value stays where it is. Nobody has access to it. This company has a whole big problem with this.

So I have a hard time believing consumers, if they really knew, wouldn't make the right choice in that situation. In any event, Your Honor, in the complaint we have at this point, that's what we allege.

THE COURT: So what you are telling me is you have alleged central functional defect. Whether or not you can get past summary judgment and whether or not you can persuade a jury that this flaw or these flaws is essential functional defect remains to be seen, but you are telling me you've adequately alleged it.

MR. SEEGER: I believe we have.

THE COURT: I understand.

MR. SEEGER: On reliance, as you know, in the Ninth Circuit, if it is a material omission, reliance is presumed. In any event, I believe we've alleged adequately in the complaint that had our consumers known this information, it would have been important to them, and I believe that's how materiality is generally defined; information that would have been important to the consumer. They would have paid less or not purchased at all.

Then on the constructive fraud, Your Honor, I think the big issue here is you've heard our arguments on omission, reliance, damages. The big issue is the confidential relationship. Intel says we haven't pled it. We believe that -- well, we don't believe -- the cases say that a confidential relationship is a fact issue, whether or not one has been created, and so it is not really appropriate for a motion to dismiss.

THE COURT: But tell me what facts have you alleged that would plausibly show a confidential relationship exists?

MR. SEEGER: Well, again, it is not on the screen here. And on the screen we are showing you the complaint references that we believe answer the question you just asked. But in addition to that, and this is also in the complaint, it is the fact that this company chose to take this marketing

campaign directly to the consumers. It was all designed to create comfort and to believe that their chips were the fastest and as secure as anyone else. In addition to that, we put allegations in the complaint that say plaintiffs were vulnerable to Intel; reasonably relied upon it to make full disclosure regarding the security of its CPUs.

THE COURT: I am worried about the implications of that argument so that when a manufacturer markets to consumers and tries to persuade consumers of certain things and allegedly or arguably the manufacturer doesn't tell the consumers everything, that might be sufficient to create a fact issue on whether or not there is a confidential relationship between that manufacturer and that consumer, the implications of that worries me, because there are a lot of legal consequences to being in a confidential relationship with someone that would be very different from normally the situation of an arm's length seller and buyer.

MR. SEEGER: I understand --

THE COURT: Anything you can say to make me feel more comfortable.

MR. SEEGER: Yeah, I can. I think it really depends on what the information is that is withheld. It depends on what type of relationship that has been created between a manufacturer of a product and an ultimate buyer. "Secure to the core," Your Honor, is a pretty powerful statement.

I think companies have to be held accountable for what they say to the public. There is puffing and then there's -- that's not a puffery statement, in my view. That's at least saying, at a minimum, that your secrets are as protected with us as anyone else.

THE COURT: But as I read in your memo in opposition, you've abandoned the theory of affirmative misrepresentation.

MR. SEEGER: I know, but for the most part -- I don't want to preempt anything that Rosemary has to say. I am really trying to respond to the question that you are asking about the confidential relationship, and I think it starts with the marketing campaign to consumers.

THE COURT: I have no problem holding speakers responsible for affirmative misrepresentations, assuming they dot the I's and cross the T's, and they really are misrepresentations. But saying then that those misrepresentations create a confidential relationship with all the legal baggage that that would bring along still gives me concern.

Okay. Where do you want to go next?

MR. SEEGER: I'm just trying to -- I think the Frye case -- and to be honest with you, I have to tell you I was really impressed with Mr. Katz's ability to remember all of those cases and all the details on them. I was going to compliment him about it outside in the hallway, but I will do

it here.

I don't remember all of the details of the Frye case, but I do remember that in that case there is a pretty adequate discussion of what -- the fact that the confidential relationship is a question of fact. I believe there it was representations made by wine sellers to purchasers of wine, which I don't think are any -- I think if the Court in that case found a confidential relationship, I think it we would be --

THE COURT: But wasn't that the case where they promised "sign up with us, and we won't give your information to anybody else." And in exchange for that signing up, people gave some confidential information to the defendant. I thought that the issue there was a confidential relationship was developed because I said to you, "You give me your confidential information, and I will protect thus and such," and that was at least a fact issue of whether we had a confidential relationship. We don't have that here, do we?

MR. SEEGER: So thank you for reminding me of the fact pattern, Your Honor. I was looking for my notes on it. I think it was a very similar situation. By telling consumers that this computer chip is secure to the core, that you're as safe as others, people are trusting that manufacturer of the CPU with their secrets. Now, they're not uploading them in the same way that you would to the wine club, or whoever the

defendant was.

THE COURT: Right.

MR. SEEGER: There is a difference in that respect. But they are still being trusted to protect people's most private information, their account information, passwords, and all of that stuff.

THE COURT: When I buy a door lock from a hardware manufacturer, I hope it will work. I hope it will be secure. But I'm not entering into a confidential relationship with that manufacturer.

MR. SEEGER: No. But if you buy a safe from a safe manufacturer, and you put your jewels in the safe, you don't expect somebody to just come along, turn it once, and open it up.

THE COURT: I totally agree. But I'm still not entering into a confidential relationship with the manufacturer of the safe.

MR. SEEGER: Well, I mean, it would depend on what the safe manufacturer said to you to get you to buy the safe.

THE COURT: "We have got the best safes around. They're impervious." I might sue them for breach of implied warranty, breach of express warranty, breach of contract, fraud. But I still haven't entered into a confidential relationship with them.

MR. SEEGER: Well, I also think, and what we've

alleged in the complaint, it goes beyond that. It was the withholding of this material information about the product.

THE COURT: Okay.

MR. SEEGER: Your Honor, I'm going to hand it off.

THE COURT: Very good.

THE COURT REPORTER: Judge, I need a break.

THE COURT: How much time do you want?

THE COURT REPORTER: Ten minutes.

THE COURT: All right. So we'll take a ten-minute recess. Then we will pick up with implied warranty and Ms. Rivas.

(Recess.)

(Open court; proceedings resumed:)

THE COURT: Picking up where we left off -- and either of you can answer this or both of you. Picking up where we left off, when I was telling you about sort of my reaction about still using Intel processors in my computer, and you expressed some surprise, it seems to me a more realistic and appropriate legal test is, what are the plaintiffs doing? I don't think I saw in the amended complaint an allegation that now that the plaintiffs know about this flaw, they are no longer using their computers that have the Intel processors.

What does that absence do to the element that requires basically a core functional defect?

MR. SEEGER: I don't think it does anything,

Your Honor. The reason I say that is because, remember, all of these people, like everyone else who has an Intel chip, are being told to download patches. I think they feel safe right now. Just like, Your Honor -- I am just using you because you've talked about your computer. You may have downloaded all of the patches --

THE COURT: Not intentionally. Whatever those --

MR. SEEGER: But you are okay with the performance impact, because to you personally what you are doing, you know, you notice it, but you are not crazy about it. My point is, though, I think that all of the -- I think that the consumers are doing what they are being told. They are downloading patches, and they think that's what they have got to live with, just like when you get those updates on your iPhone.

THE COURT: So what does that do to this argument of central functional defect?

MR. SEEGER: It doesn't change it.

THE COURT: Why is there a central functional defect? It is like, well, before the community knew about this problem, the community didn't know about this problem, or we didn't know about the proof of concept. Now that we do, there are patches. The patches slowed things down. Nobody is stopping using their computer, or at least the plaintiffs haven't alleged that they're stopping using their computers or that they can't use their computers.

So where is the central functional defect?

MR. SEEGER: First of all, it is a two-part answer. The central defect is the fact that the CPUs aren't secure. They fixed that, right? They say they fixed it. We don't think it is fixed. We think the only fix is really a hardware fix.

But they say we have mitigated that problem with the patches, and so maybe that's not the big problem, and right now the big problem is that everybody who is downloading those patches do not have the processing speed that they were told they would get when they bought the best.

Now, can I do this by way of -- for a little bit? I believe it is the Chrysler-Jeep Ecodiesel case, a case that I'm very familiar with. It was the Volkswagen clean diesel case. I want to do this by example of that because I think in that case they're cars.

The problem was they had cheat devices. You could drive it like a car. You could brake like a car. You could speed up. But when the cheat device kicked in, it polluted. What people were sold in those cases were a car that was supposed to be green. It was supposed to be clean. And they didn't get what they paid for. I think that was important in the Chrysler-Jeep Ecodiesel case. There is no opinion in the Volkswagen clean diesel case because it settled, clearly.

So again, the concept of central function kind of has

to relate to: What is the consumer expecting when they are buying the product? I can't believe that a consumer who buys an Intel CPU thinks that by getting the best processor on the market that they are open to these security defects. Or they will fix their defects, but now you don't have the Intel processing speed that you thought you bought. So the consumer is hurt either way.

THE COURT: Well, they may be hurt. But are they hurt by a "central functional defect," as that phrase has been defined in the law? They may not have gotten the full value of what they were hoping to get. I get that.

But to the extent that a plaintiff has to prove a central functional defect, either as part of a duty to disclose, or as we will get to in implied warranty, how are we giving any real meaning to that phrase if we say, "Well, it's slower than you were hoping for. The process is slower than what you were hoping for, but you are still using it. You are still buying new ones."

MR. SEEGER: Here is the answer to that, Your Honor, and I could probably scroll through the cases and find some language before we are out of here today. But in the one instance -- so there could be more than one central function to something. In the one instance, it's security. So while they're unfixed, unmitigated, and unrepaired, there's a security defect that does go to -- is a central feature of a

CPU, which is processing and security. I don't think any consumer thinks otherwise.

Then they have patches that come along and fix it, and now they've impacted the central function of processing speed, which is exactly what they thought -- anybody who buys an Intel chip, who is told buy "Intel Inside," believes that they are getting a state-of-the-art/top-of-the-line processors.

THE COURT: I get, to the extent that you are saying there that they are not getting what they paid for, I understand that allegation. But I don't see how that satisfies the element of central functionality, because they're still willing to use their patched processor. They are still working with it as a computer. Nobody has alleged, "Based upon these flaws and/or these slowdowns or these diminutions in performance, I'm no longer using my computer with Intel inside." I could see why they might be upset; why they might say that they didn't get what they paid for.

But how is it a central functional defect if they are still using it?

MR. SEEGER: Your Honor, I think that you look at the sale at the time -- you look at the product at the time the consumer buys. It is the point of sale. The central function of a CPU when they bought it was processing speed and security. I don't mean to repeat myself, but I think it is really important. I think this is a point-in-time question. So when

they bought their Intel CPUs, they believed that they were the best processing speed and they were secured. They didn't get security. Now they are getting patches to fix that central function, and those patches are causing a problem. So I'm taking a crack at this from another way. I can tell from your face that you are not sure.

THE COURT: I'm struggling with what both sides have said. Sometimes I completely agree with what both sides have said -- not on the same point usually -- and other times I am skeptical about what both sides have said. And I am still struggling with this. I will assure you, I'm not ruling from the bench.

MR. SEEGER: One last thought: I know in many respects I am referring to a case that you are not going to find a written opinion on what I am about to say, so I apologize for that, but I do think it is instructive. And if we are struggling, I think it is a good example to think about.

But the Volkswagen case is a very good one. The argument could be made you still have a car. The car is polluting, but you still have a car that does everything a car does. And there's a company that ultimately agreed to buy back cars and modify them. And cars that were modified that impacted performance, consumers got cash on top of it. I understand that I am referring to a settlement and not something that is going to necessarily help you.

THE COURT: And maybe that's one of the reasons why that case settled. If the plaintiffs in that case had to prove that the non-pollution feature was a central functional aspect, could they do it? I don't know. And maybe that uncertainty led to settlement.

MR. SEEGER: I think we clearly could have done that because it was such a big part of the campaign and the reason why those people bought those cars. They did want a green car. People buy Intel for a reason.

THE COURT: Okay. Thank you.

Ms. Rivas, welcome and thank for your patience.

MS. RIVAS: Your Honor --

MR. SEEGER: Your Honor, I'm sorry.

THE COURT: I'm letting you fight this one out. I'm staying out of it.

MR. SEEGER: I am sorry to Rosemary, Your Honor, but you got my head spinning. There was an opinion just issued last week. I didn't send it in because I didn't recognize it. It is in the Mercedes BlueTEC Litigation, Judge Linares, District of New Jersey, and the allegation that involves Mercedes cars with this diesel problem. The allegation there of standing. The Third Circuit doesn't have this central function test, I think, the way the Ninth Circuit does. I think that's a case that would be very helpful.

THE COURT: Thank you, Mr. Seeger.

Ms. Rivas.

MS. RIVAS: Your Honor, just to add to a little bit of this dialogue, the law doesn't require that you throw your car away or that you stop using your car or that you stop using your device, if it's an iPhone that you pay now $1,000, or whatever. That's not what the law requires. And as Mr. Seeger said, these products have multiple functions, multiple-function central functions.

So I'll now go back to my argument. I just wanted to say that.

We prepared some slides, but I'm obviously not going to go through all of them, because during your discussion with defense counsel, you honed on a few things. One, the third-party beneficiary requirement --

THE COURT: And where have you pled that in the complaint?

MR. SEEGER: Well, that's what I'm going to get to.

THE COURT: Okay.

MR. SEEGER: Your Honor, I think In re Sony Vaio Notebook Trackpad Litigation -- the cite is 2010 WL 4262191. The Court said that you can't get away with just making legal conclusions, and you can draw reasonable inferences. And that's what the Court did with regard to the third-party beneficiary.

THE COURT: So which contract does plaintiff contend

they are a third-party beneficiary to? Oh, I just ended a sentence with a preposition.

MS. RIVAS: You can infer from the allegation that Intel has asked the OEMs to include on all computers the label "Intel Inside." You can infer that there is a contract there, I think.

Beneficial? Does it benefit the consumers? I think you can infer that as well. If Your Honor thinks that we can't infer that from what we have, I think we can amend, and we can certainly include those allegations.

THE COURT: Therefore, for a third-party beneficiary analysis, do we have to get down the line of whether someone is an incidental or intended third-party beneficiary?

MS. RIVAS: I think incidental is enough, but I think here the consumers are more than incidental. I think that Intel is selling its chips to the OEMs, to retailers who sell the chips, precisely so that they go to consumers. They are not selling them so that Best Buy can use them on their computers. It is intended so that the consumers will buy them and use them. I think that's why you can infer that and why it is even more than incidental, Your Honor.

THE COURT: Would it create a problem under this theory if a contract between an OEM and Intel contains a provision that this contract does not create any third-party beneficiaries?

MS. RIVAS: I don't think it would, Your Honor. I do think that all the cases on this issue, third-party beneficiary, they haven't examined it as closely as you're asking. They haven't asked, "Well, what does the contract say?" From what I know, none of the cases say exactly that. But I think a party could just put boilerplate in, and you have to look at whether it really does benefit the consumer or not, and I think there is case law to support that.

THE COURT: Okay. So let's assume you get past the vertical privity issue. How do you state a claim for implied warranty?

MS. RIVAS: It kind of connects with what you've been talking about with Mr. Seeger. I want to go through some principles that I have been able to discern from the cases when you are looking at is a product fit for the ordinary purpose of its use.

One of the principles is you have to consider what the reasonable consumer would think. That's the Carrier IQ case. That's the case where it was the mobile devices -- and this is an industry-wide issue, because I was on that case. It was an industry-wide issue basically that the wireless phone manufacturers were putting software on all the phones so that any data, like texts and calls would get transmitted to third parties.

The Court there looked at what a reasonable

consumer's expectation is and said that a phone is not just for calling and texting. It is to do -- one of the things that a consumer would expect is that would be done privately and that you wouldn't send that information off to a third-party. So that's the first principle.

The second principle is that a defect does not have to render a product completely useless. And that's important, because in Carrier IQ the phones weren't rendered completely useless, and people continued to use them. But that didn't have any bearing on whether the implied warranty of merchantability was breached.

And an example -- I think it was defense counsel gave this -- was a moldy bed. You can still sleep in a moldy bed, but a consumer wouldn't expect it to be moldy, and it just goes against the argument that you would drill down the purpose to its basic essence.

That goes into my third principle, and I've probably already said it. But when you are looking at what's the purpose, you don't reduce it to its bare minimum. So with a car, a car's purpose isn't just to provide transportation from A to B. The purpose of a car is to provide safe and reliable transportation, and that is how the Courts have looked at it.

THE COURT: And so if we apply that here, I get that even if a car runs, if you know it is unsafe, you are not going to want to drive it. Even if a bed that's moldy can support

your body while sleeping, you are not going to want to sleep in it. I get it. And you're probably right; it would get back to what would a reasonable consumer think and want.

How do I deal with my skepticism that a reasonable consumer who was aware of, especially Flaw 1 would say, "I don't want an Intel chip." Now, maybe the skepticism comes in by you telling me, "Well, we've pled it. It is plausible. If we can't create a genuine issue on that, we will lose at summary judgment. If we can create a genuine issue, but we can't persuade a jury, we will lose at jury trial. But we have pled it, and that's good enough."

Is that right? And now, how has the landscape changed under a plausibility framework?

MS. RIVAS: I guess I'm not understanding your question, Your Honor.

THE COURT: Well, we talked about the 18 people or so that bought new computers. I understand Mr. Seeger's response, "Well, yeah, now that the patch is out." I think I'm beginning to understand the basic vulnerability here, but I just don't see how it is analogous to a moldy bed or an unsafe car or even a smelly car. It is a theoretical risk that bad guys can get into my computer through a side channel.

MS. RIVAS: Your Honor, I think you are assuming that it is theoretical, and I don't blame you for saying that, because defendants have said that I don't know how many times.

That's in dispute whether it is theoretical or not.

I would also say that, by all indication, it is not theoretical. They are redesigning their chips. They're changing the hardware. They have issued all of these patches. They've worked with industry members to roll out these patches. They're telling people that you need to download these patches.

THE COURT: How is that probative that it is not theoretical? It is like if they've discovered a theoretical way to exploit the security in the chip, and they want to prevent it, fine, good. But how does the fact that they are trying to prevent it from being exploited in any way probative on the issue that at this time it is not anything more than theoretical?

MS. RIVAS: I think it is highly probative.

THE COURT: How?

MS. RIVAS: Because the industry and a company just doesn't take action for whatever reason, and they don't just redesign their chips because it is theoretical.

Look at the car case with the hacking. The industry hasn't changed the way their electronic systems are working. They haven't changed it, and that was a speculative risk that the Court found, but you don't hear the industry doing anything about that risk.

I would also say that the massive performance impact indicates that it is not -- well, not massive -- but there is a

dispute as to what it is. But the performance impact, they're redesigning all of their chips, they are issuing all these patches, even though that's impacting these chips. It is impacting all sorts of companies that use their servers and whatnot.

THE COURT: So your argument, if I understand it correctly, is that, among other things, because the patches and the corrections are having a significant degradation of performance, as plaintiff alleges, they would not be incurring those degradations of performance if it wasn't more than a merely speculative or theoretical risk?

MS. RIVAS: Yes, Your Honor. We don't have a smoking gun at this point -- and we may never get one -- but we haven't gone through discovery.

THE COURT: I think Mr. Seeger may have mentioned that.

MR. SEEGER: Many times. (Laughter.)

MS. RIVAS: So at this point it is a factual dispute that shouldn't be resolved on the pleadings, Your Honor.

I will also say that the fact that -- and maybe I'm repeating myself -- but the fact that they are redesigning their chips lends itself to our position that these chips weren't fit to provide safe computing.

Going back to the purpose, the purpose isn't just for computing. People use computers to store confidential

information. People use computers to compute safely and securely, and I think if we were to do a survey of consumers, we would find that's what consumers' reasonable expectations are. In fact, all of the alleged plaintiffs have alleged that in the complaint. And it isn't just the plaintiffs that expect the chips in the CPUs to be secure, it's even Intel.

These statements that I'm about to read are available through the link at paragraph 318 in our complaint. But what Intel says is, "Protecting our customers' data and ensuring the security of our product are top priorities at Intel. Intel has a long history of focusing on security. At Intel, security has been one of our highest priorities. For years we have built security into every product we create and worked to deliver breakthrough security technologies."

That all indicates that part of the purpose and the fabric of a CPU is that it's secure.

THE COURT: So those statements are not offered as evidence of an affirmative misrepresentation, but instead as evidence that the security is part of the central functionality of the chips?

MS. RIVAS: Yes, Your Honor.

THE COURT: All right. I understand. I hear you.

MS. RIVAS: Now, the AMD case, apart -- Mr. Seeger kind of went through a few of the distinctions with that case. But one of the things that I thought, and with all due respect

to Judge Koh, that was wrong, when she was considering the defect, I thought she conflated the defect with the performance impact of mitigation. The defect, as defense counsel said earlier, is the defect at the time of purchase. The mitigation wasn't available at the time of purchase. But the defects -- the two defects, Flaws 1 and 2, were present at the time, and that is a security -- that is a security risk.

THE COURT: I think the plaintiffs have filed another amended complaint, right?

MS. RIVAS: That's correct.

THE COURT: Have they specifically articulated in Hauck v. AMD what the defect is now in their new amended complaint?

MS. RIVAS: I believe they have, Your Honor.

THE COURT: What do they say? And then the next question is going to be: Is that the same as the defect in this case, or is it different? And if it is different, how do they differ?

MS. RIVAS: Their defect -- I don't know how they define it in the complaint.

THE COURT: I think it is attached to one of defendant's replies.

MS. RIVAS: It's Spectre that's at issue, not Meltdown and not Foreshadow.

THE COURT: So how would you articulate the defect in

this case?

MS. RIVAS: Technically, giving you the technical jargon, I would have to explain what's in paragraph 22 -- in my plain English, when the computer processes are accessing memory, they leave protected information that could be available to malicious actors.

THE COURT: And you're saying that was not well known in the industry?

MS. RIVAS: The microarchitecture that Intel employed, no.

THE COURT: The defect as you've just articulated it.

MS. RIVAS: That's my plain English.

THE COURT: Isn't that something that has been known in the microarchitecture industry for quite a long time?

MS. RIVAS: I think people know in the industry that there are vulnerabilities. But when a company knows of a specific vulnerability, I don't think that's an excuse to say, "Well, people know there are vulnerabilities." It is just like if you -- if someone went to an amusement park and got on a defective Ferris wheel, and they had signed away that they had agreed that they assumed all risks, but the company knew of a particular risk with regard to that Ferris wheel, I don't think that would absolve the amusement park.

THE COURT: No. But wouldn't it show that you wouldn't be able to satisfy the third LiMandri factor of a

defendant having exclusive knowledge of material facts not known or reasonably accessible to the plaintiff?

MS. RIVAS: Your Honor, I think we've been over this, and I think Mr. Seeger explained it. But only Intel knew about this particular issue with the unauthorized access from its program instructions. That's something only Intel knew. It is something very specific that the public did not know about.

THE COURT: Then how did Google Project Zero figure it out?

MS. RIVAS: Google Project -- my understanding, in basic plain English, is that they figured out the exploits, but they did not pinpoint it to Intel's microarchitecture.

THE COURT: Say that again one more time.

MS. RIVAS: Google and the other industry members figured it out -- figured out the exploits -- but they didn't pinpoint it to the microarchitecture that we have identified.

THE COURT: So the industry figured out what the vulnerability was and how to exploit it but didn't necessarily know all of the details of why that vulnerability existed?

MS. RIVAS: Exactly.

THE COURT: But still, just the existence of that vulnerability, doesn't that defeat the third LiMandri factor of the exclusive knowledge and material facts, because when both you and Mr. Seeger were explaining to the defect, it was this vulnerability?

MS. RIVAS: No, Your Honor. I think there's a disconnect. I think generally academics and researchers know that there are vulnerabilities, but their microarchitecture that led to those vulnerabilities, they don't know about that.

THE COURT: Well, I agree with that, but they figured out the defect. What you're saying Intel should have disclosed was the existence of the defect. You are not saying that Intel should have disclosed all of the proprietary details of how their microarchitecture worked. You're saying they should have disclosed the defect.

MS. RIVAS: Well, the plaintiffs, with consultation from experts, were able to pinpoint the reason and the microarchitecture that provided the ability for the exploits to happen.

MR. SEEGER: Can I help on this, Your Honor?

THE COURT: Sure.

MR. SEEGER: Nobody outside of Intel understood what we call Flaw 1, the fact that real values are being delivered to transient instructions. Side-channel attacks have been known about, you've heard, for years, for decades, and they operated in various ways.

Our allegations -- hopefully the complaint is clear on this -- basically Intel made it easier for those side channels to come in and take the information. Flaw 1 is peculiar to Intel. That wasn't identified -- as far as we

know, that was not identified by the Google Project Zero, but it was a fact that it was the success of the exploits.

THE COURT: I thought when it was disclosed, the Meltdown and Foreshadow vulnerabilities -- who disclosed that? I thought that came from the Google Project Zero folks. No?

MR. SEEGER: I have to correct one thing before I get the answer from Chris. They never exposed the defect. It was the success of these exploits.

THE COURT: The vulnerability.

MR. SEEGER: The vulnerability.

(Pause in proceedings.)

MR. SEEGER: They disclosed both of them, Meltdown and Spectre. Foreshadow came later. I want to make sure of the timing.

THE COURT: So the industry figured out and knew the vulnerability. For a long time they had known about side-channel vulnerability generally. In 2017, it became public that there were certain types of vulnerabilities that might not have been known before. What you are saying is that within the exclusive knowledge of Intel was how the microarchitecture worked that allowed that specific vulnerability.

MR. SEEGER: And that makes Meltdown and Foreshadow successful with them in a way that it doesn't with other chip manufacturers.

THE COURT: Okay.

MS. RIVAS: Just to finish up on the implied warranty of merchantability. Again, we think that Judge Koh, and I say this with all due respect, that she conflated the defect with the damages, and she considered whether the 30 percent performance impact that the plaintiff alleged there, she considered that to be the defect and then went on to determine that that basically was de minimis. We think that's a factual issue, and that that's disputed.

THE COURT: What's the factual issue? Whether it is de minimis or whether the defect is the performance degradation?

MS. RIVAS: Whether it is de minimis.

THE COURT: Okay.

MS. RIVAS: And she determined it was de minimis. Then she said -- and this was the gist of it -- this doesn't render the product unfit for its ordinary purpose of use.

So I would like to turn now to the UCL claim. The UCL claim, in particular the unfair business practices claim. Whether a practice is unfair is generally a question of fact, unless the Court can determine on the face of the complaint that it is not unfair, and the reason for that is because the Courts employ a balancing test, so to speak, and the test that they employ is that they determine that a practice isn't fair if the harm to the consumer from the practice is greater than

the utility of the practice. And employing that test requires a weighing of the evidence that we would obtain through discovery.

My point here is that our unfair business practice claim is not based on the fraudulent conduct. We have -- in particular, I have identified certain paragraphs that define what the unfair business practices are, paragraph 384, "Intel knowingly designed, developed, manufactured, and sold CPUs with material defects that result in security risks, compromising confidential information and a patched slowdown CPU so that consumers do not receive the benefit of their bargain. Intel put profits over safety of consumer data by permitting instruction execution without first performing and enforcing the appropriate memory access checks as a means to increase practice or performance." That's also paragraph 384c.

"Intel failed to take steps to secure CPU architecture from cache side-channel attacks." That's paragraph 384d.

So those are the unfair practices that we are alleging. They are distinct from the fraudulent conduct. So the claim for unfair business practices does not rise and fall based on whether the fraud claims succeed or not.

Now I would like to move into the unjust enrichment claim. A quasi-contract unjust enrichment claim for restitution is obviously recognized under California law

THE COURT: As a remedy or as a cause of action?

MS. RIVAS: As a cause of action under Astiani.

THE COURT: And what are the elements?

MS. RIVAS: I have it right here. "To allege unjust enrichment as an independent cause of action, a plaintiff must show that the defendant received and unjustly retained a benefit at the plaintiff's expense." That's cited in the ESG Capital Partners v. Stratos case. And as you can see, Your Honor, that doesn't depend on whether the defendant committed fraud or showing that the defendant committed fraud or violated some other law.

THE COURT: But they must have received it and retained it unjustly. So what are the elements of receiving and retaining something unjustly?

MS. RIVAS: Well, you'd have to look at the equities of the case, Your Honor.

THE COURT: What are the factors?

MS. RIVAS: While the factors consider whether the defendant did something, maybe it was either an unfair practice, maybe it was through a mistake, maybe somebody gave them something by mistake. It's also putting a product out there that's defective. That could be unjust.

I would say that reading -- I went back and read the claim for unjust enrichment, and it does speak to being based on fraudulent conduct. I would submit to the Court that, based

on the allegations in the complaint, we can state a separate claim for unjust enrichment that's independent of the fraud, and I would like to go over some allegations that I think would support that.

"At the expense of security and to gain an advantage over its rival AMD, Intel knowingly designed CPUs to allow the unauthorized access of confidential information." That's paragraphs 2 to 3, 5, 8.

"The Meltdown/Foreshadow exploits, due to the security flaws in the Intel CPUs, are exclusive to Intel." That's paragraph 315.

"The patches Intel has rolled out dramatically reduce the performance of the CPUs and take away functionality and do not fix the defects." Those are paragraphs 297, 303 to 314; 306 to 307.

"Had plaintiff known that in designing the CPUs Intel failed to take adequate measures to secure stored data, plaintiff would not have bought the products contained in Intel's CPUs or would have paid less for them." That's paragraph 400.

THE COURT: How is that consistent? This is the same thing I asked Mr. Seeger. I'm having trouble with that. If it is so bad that a reasonable consumer wouldn't have bought it, okay, I get that. I'm not going to buy a moldy mattress no matter how cheap it is. But if your alternative is, "or they

would have paid less for it," then it just seems to me, well, then there's a tradeoff between security and price and security and price and performance, and they're all different factors, and so be it.

I don't see how it is consistent to say that someone would either not pay for this had they known the real security flaw here, or "the defect," as you put it; or maybe they would have insisted on getting a bigger discount. I don't see how those are consistent.

MS. RIVAS: They are consistent. Well, I don't think they are inconsistent. I mean, I'm trying to come up with real-world analogies.

Your Honor is obviously struggling with the fact that people are still using them now that they are patched and that some people bought them again. I would say that, you know -- again, going back to my analogy, the requirement in the law isn't that you stop using it, especially if it is patched.

The fact that they bought the product again, maybe they bought it for a different reason. But I think materiality and reliance and those issues, you just don't have to show that one factor caused you to rely on buying the product. You could buy a product for a whole host of reasons. Two may be material; one may be material. I don't think the fact that someone bought it again is fatal to these claims.

THE COURT: Let me ask you this question, and I'll

make this purely hypothetical. I have no idea how Intel makes its decisions. So whether this is a decision made at product development or by its board, I don't know.

But assume the right decision-makers at Intel are having a discussion, maybe in 2006, give or take, and they're exploring what they believe is a theoretical possibility of a flaw that later turns out to be what we know and refer to as Meltdown or Foreshadow, and somebody says, "Well, that's just theoretical. It will take a lot of sophistication and equipment and technology to be able to possibly exploit it, and then everything else would have to line up in place, and we think it is very unlikely it will ever be exploited. And if we were to totally eliminate that possibility, it would reduce processing speed."

And somebody else says, "And processing speed is one of the most important things that we have, that we offer, that our customers really want."

And they say, "Okay. We are going to decide on this balance to go with processing speed over theoretical security risk."

Now, putting aside sort of how they market it and sort of the deception areas that you've described, is that decision that they've just made, as I described, unjust, or would that support a theory of unjust enrichment?

MS. RIVAS: I would say that it is unjust, especially

when, for example -- just giving you an example -- someone bought an i7 chip, and it turned into an i5, and they paid more money for that i7 chip than they did for the i5. That means that Intel benefited from the overpayment -- from the payment -- or a consumer paying more for that i7 chip than they would have.

THE COURT: So if you were at this meeting as Intel's general counsel, and you heard this discussion, "Some people talk about this vulnerability that can show a potential of unauthorized access, but your technology experts there say that they think it is unlikely, a number of things would have to line up before it can be implemented. It's very unlikely. But if we do completely eliminate that risk, then that would adversely affect our processing speed."

Somebody else at the meeting says, "And processing speed is really what helps us differentiate ourselves, and so I recommend we go with processing speed and accept this security flaw."

You, as the general counsel, would tell them, "No, you can't do that. That's an unjust decision. You have to err on the side of eliminating all theoretical possible security flaws no matter what it does to processing speed"? That's the advice you would give them.

MS. RIVAS: I don't think that's correct, because they are redesigning the chips now, so they are now willing to

compromise speed. So to me, if they are willing to redesign the chips and compromise speed because of this vulnerability, then they should have made that decision at the outset.

THE COURT: Now, what if they made that decision before they knew of the proof of concept that the Google Project Zero team revealed?

MS. RIVAS: Well, if they are getting an unfair advantage, and I'm sure they know what their competitors are doing or have an idea what their competitors are doing, I think that's unfair in the market. It's unfair for competition to gain an advantage over another competitor and to not give consumers that choice and to not fully inform consumers of their choice.

THE COURT: But now we are back to informing consumers. You're telling me that they could make that choice as long as they adequately disclosed that. So the choice itself isn't an unjust choice. It is the choice coupled with not giving an adequate disclosure of the choice --

MS. RIVAS: If I may go back one step, and then I'll answer that question. If I was their general counsel, I would tell them, "You know what, you could do that, but you are going to be sued, and you are probably going to have to refund or pay damages." That's what I would tell them.

THE COURT: Even if we disclose everything.

MS. RIVAS: Now, that's the other issue --

THE COURT: I'm trying to isolate the decision. Is the decision itself an unjust decision, or is it the combination of making the decision that way but not giving the disclosure?

MS. RIVAS: I think they are independent.

THE COURT: And that's why I'm trying to figure out: Why is the decision independently unjust if there is an adequate disclosure?

MS. RIVAS: I think what you are saying is that the company has the choice of making the disclosure or not making the disclosure and just keeping it to themselves.

THE COURT: No. I'm saying that you have to balance security versus performance. How you choose to balance that is not inherently just or unjust. Where the problem may come in is if you misrepresent how you balance that, but that's inconsistent with what you said in the very beginning, how this idea of how the unjust enrichment theory is different from and separate from basically the fraud and deception aspect of the case. That's what I'm trying to understand.

MS. RIVAS: Okay. I'm trying to follow Your Honor, and I apologize if I'm not. It is different than the disclosure case, because we could have filed this case based solely on the unjust enrichment claim, and Your Honor would have analyzed it under the authorities. We didn't have to bring distinct claims. Just like we brought the implied

warranty of merchantability claim, again, that could serve the basis of the unjust enrichment claim. It is unjust for a defendant to put a product out there that's not fit for its ordinary purpose. So you don't need -- you don't need the fraud part of it or the disclosure part of it.

Going back to the disclosure, what would that disclosure be? I mean, there was dialogue about that, but there are various things that could have been disclosed. "We prioritized speed over security. As a result, unlike others, it's possible for programs to get unauthorized access to secret information. We don't know whether that's happened. Can't detect it. However, if we have to patch, you'll experience material performance loss. If that happens, our chips will experience about three times more of a performance" -- I mean, that's just something, you know, that we've thought about, and, you know, obviously it would depend on how the case goes. And we would formulate exactly what they knew and exactly what they should have disclosed. But I think at the outset we state a claim for that disclosure -- for the nondisclosure omission-based claims, and we state a claim for unjust enrichment.

THE COURT: Do you know agree that to state a claim for failure to disclose, a plaintiff must articulate what should have been disclosed and when it should have been disclosed?

MS. RIVAS: No. I think you have to show there are material facts that weren't disclosed, and how you articulate what the disclosure could have been to the consumer, I think can be refined. But I think we have alleged the material facts here that should have been disclosed.

THE COURT: Okay.

MS. RIVAS: That's all I have, Your Honor, unless you have more questions.

THE COURT: Thank you, Ms. Rivas.

Anything further from plaintiffs?

All right.

Rebuttal.

MR. KATZ: Your Honor, I think I covered everything in my presentation this morning. Unless you have any questions, I don't have anything to add.

THE COURT: Okay. Then I would say surrebuttal within the scope, but that takes care of that. (Laughter.)

MR. SEEGER: Here is my surrebuttal: I have nothing to add.

THE COURT: All right. I'm going to take this under advisement.

I do appreciate the outstanding written and oral advocacy, as always, in this case, and you have given me an awful lot to think about. The judicial notice motion, that's gone. The motion to dismiss is taken under advisement. I

can't give you a good estimate of when I expect to get you a decision. I will turn to it responsibly.

I will say this, though, and we talked about this at the end of our technology session. This case will resolve at the trial court level, either by me dismissing the complaint at the 12(b)(6) stage or at the Rule 56 stage, or by a jury decision, or by settlement. It is going to be resolved in one of those four ways, I think, and I suppose, theoretically, by some type of standing issue.

All right. You'll continue your excellent advocacy as we go through standing motion to dismiss, summary judgment, and trial, I'm certain. With respect to a possible settlement, and I am going to stay out of those discussions as much as I can, except for occasionally prodding you to have those discussions. I think it will take an awful lot of creativity if this case is ever going to settle to figure out how to settle it.

Some cases are easier to see how it can be settled. Whether both sides are willing to get there, that remains to be seen, and maybe they do and maybe they don't. If they don't, it either gets resolved in motion practice or by a jury.

This one is not one of those cases, I think. This one will take a great deal of creativity and thought to even try to see if there is a possible way or mechanism or structure of settling this dispute. My guess is that you probably

already know that.

I will only say that I am really glad that people as experienced and talented and smart as you all are on both sides of this case to give that some thought, and all I will do is occasionally keep prodding you to multitask. As the processors involved in this case do, you can work on more than one transaction at the same time.

So as I work on the pending motion, as you work on thinking about discovery, I encourage you also to think about, if this case could possibly settle, what might a settlement look like? Then you can figure out, can we ever get there? If so, fine. If not, fine. But give that some thought. As long as you are all here, and there is no snow storm on its way, I encourage you to use this time to speak with each other. But as with the last time, that's not a court order. It is just encouragement.

Safe travels. The matter is under advisement.

(Court adjourned.)

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I certify, by signing below, that the foregoing is a correct transcript of the record of proceedings in the above-entitled cause. A transcript without an original signature, conformed signature, or digitally signed signature is not certified.

/s/ Dennis W. Apodaca March 4, 2019
DENNIS W. APODACA, RDR, RMR, FCRR, CRR DATE
Official Court Reporter